# JACKAROO & MONTEREY

HOLDEN

Owner's Name .....
Address .....
Town .....
State.....Postcode .....

Model Name .....
Reg. No.....Eng. No. .....
Odometer Reading .....
Date of Purchase .....

(17 character I.S.O.V.I.N.) Vehicle Identification Number

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | |

*Vehicle Identification Certificate*

Selling Dealer's
Stamp & Signature

Isuzu-General Motors Australia Limited, A. C. N. 006 962 572 (hereinafter I-GM).

**Change of name, address or ownership**

In the event of a Safety Recall, or for various reasons, we may need to contact you as the owner of this car. Also, if less than three years old, this car will qualify for Roadside Assistance, refer Chapter 9. If you have recently changed your address, or name, or purchased this car second-hand, please help us to help you by taking a few minutes to fill in and mail the form on the third page of this handbook.

Part No. 92074697
Aug 2000 (Print 2)

Part No. 92074593
July 2000 (Print 2)

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We thank you for choosing Holden and want to assure you of our continuing interest in your driving pleasure and satisfaction.

This handbook applies to current Jackaroo and Monterey models. Therefore, due to different models and options you may find reference in this Handbook to some equipment not fitted to your own vehicle.

Please note that all information, illustrations and specifications in this Handbook are based on the latest production information available at the time of printing. I-GM reserves the right to make changes at any time without notice and without incurring any obligation.

## CHANGE OF ADDRESS OR OWNERSHIP

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Please tick the appropriate box:

☐ Original Owner ☐ Subsequent Owner

Mr, Mrs, Ms, Miss, Dr, etc.

First name in full or initials

Surname or Name of Company/Institution/Government Department

Address

Street/box

City/Town

State Postcode

Car registration number

Holden Number (see page 8-8 of this book)

ISOVIN No (shown on page 8-8 of this handbook)

*Place in an envelope and mail to:*

The Manager - Warranty Administration
Service Department
Holden Limited
Box 548D, G.P.O.
Melbourne
Victoria, 3001

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CHAPTER 1

# Dash


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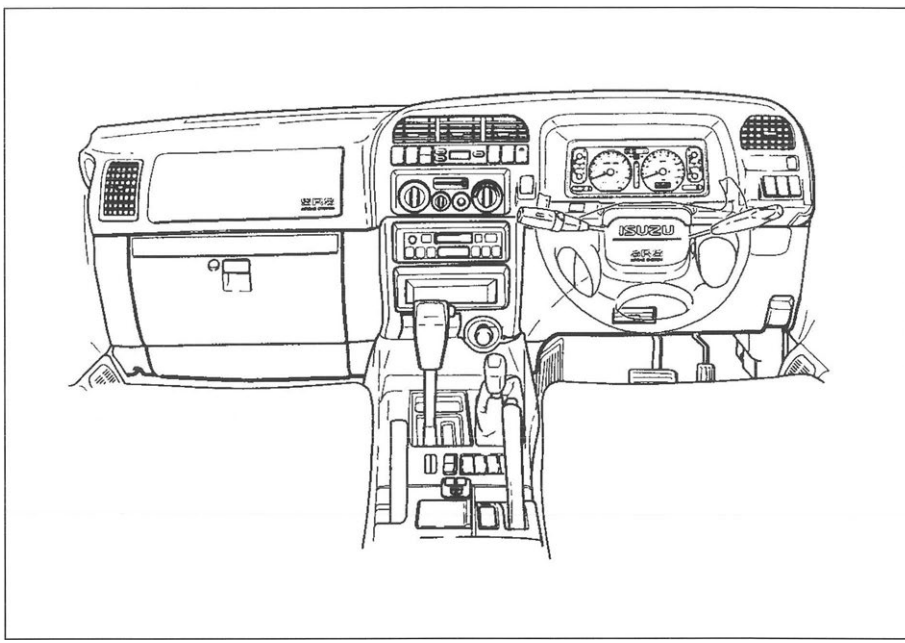
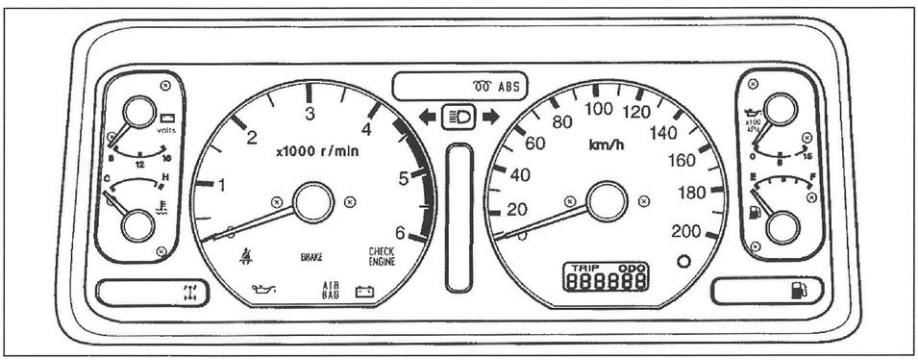
# DASHBOARD

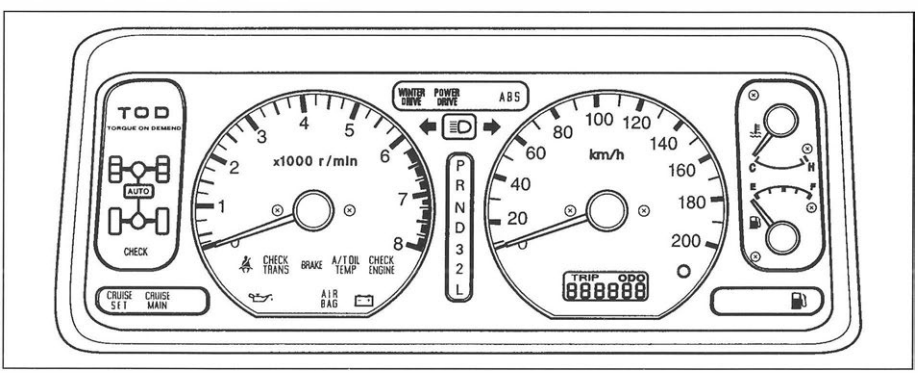


# GAUGES

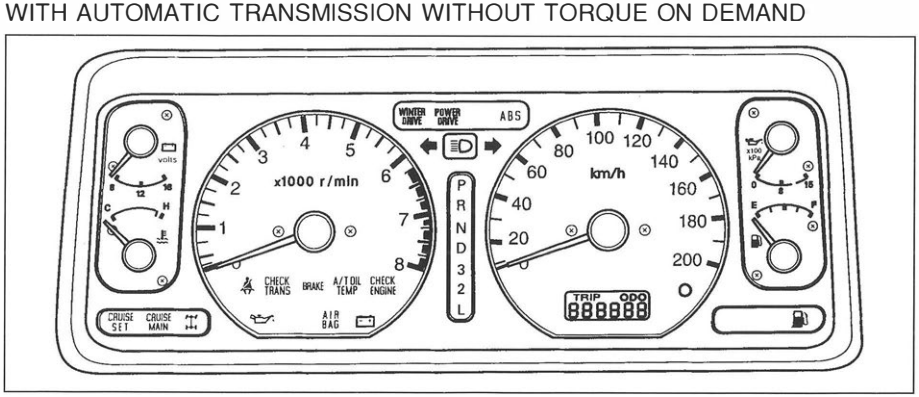
WITH DIESEL ENGINE AND MANUAL TRANSMISSION




WITH "TORQUE ON DEMAND"




WITH AUTOMATIC TRANSMISSION WITHOUT TORQUE ON DEMAND



# GAUGES

## Tachometer

The tachometer records engine speed in revolutions per minute (r.p.m.).

Continued or sustained operation in the RED zone could cause serious engine damage.

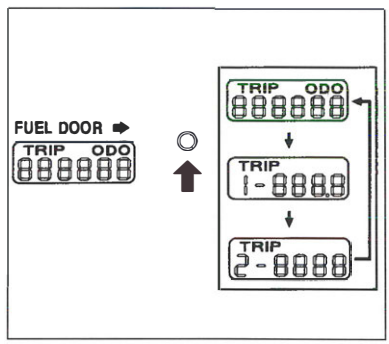
## Odometer and tripmeter

The tripmeter and odometer are incorporated in the same window, within the speedometer.

The odometer records the distance travelled since the vehicle was built, the tripmeter records the distance travelled on a particular journey. The trip meter can keep record of two different journeys at the same time.

The tripmeter reset knob is located to the right of the tripmeter, within the speedometer.

Push the reset knob for approximately one second or less and the display will change between ODOMETER, TRIP 1 AND TRIP 2. If the reset knob is held depressed for more than 1 second the trip meter will reset to zero.




## Speedometer

The speedometer gauge indicates vehicle speed in kilometres per hour.

## Voltmeter

The voltmeter indicates the condition of the electrical charging system when the ignition is turned ON.

Needle movement to the extreme left side of the gauge indicates a 'too low' voltage condition, movement to the extreme right indicates a 'too high' voltage condition. In either case the electrical charging system will require checking. Normal voltage is indicated when the meter needle is within the grey line.

# GAUGES

## Oil pressure gauge

The oil pressure gauge indicates the pressure of oil in the engine. Normal oil pressure gauge reading can range from 100kpa at when the engine is hot and idling to more than 1000kpa when the engine is cold and accelerating.

The oil pressure varies greatly with the temperature and engine speed. Therefore, if the needle does not move at all, or will not move when the engine speed is increased, stop the engine immediately and check the oil level (after allowing approx. 5 minutes for the oil to settle). Refer Chapter 7 for oil level checking information.

Do not run the engine with low oil pressure as this could lead to serious engine damage. If the oil level is normal, have the system checked at your nearest Holden Dealer.

## Fuel gauge

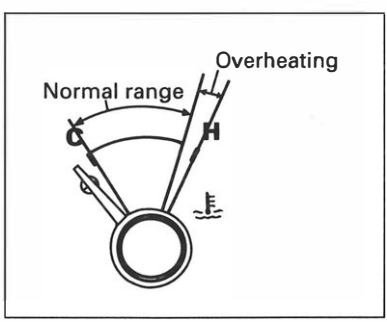
The fuel gauge indicates the approximate level of fuel within the fuel tank when the ignition is ON. "F" represents full (85 litres) and "E" represents empty.

Note that due to movement of fuel in the tank, the needle may move during turns, stop and acceleration.

## Temperature gauge

The temperature gauge indicates the engine coolant temperature when the ignition is ON. "C" represents cold, "H" represents hot.

If the needle moves to the extreme right (red area) of the gauge, an overheat condition is indicated. Refer Chapter 6 for overheating instructions, as continued operation of an over heated engine can result in serious engine damage.




## Automatic transmission indicator (if fitted)

Automatic transmission T-bar position is shown on the instrument panel, when the ignition is turned to ON.

**P**ark, **N**eutral, **D**rive, **3**, **2**, and **L** are indicated with a green light. **R**everse is indicated with an orange light, designed to remind you to ensure that the vehicle is brought to a complete stop before moving the T-bar to a forward gear position.

# *WARNING LIGHTS*

## Turn signal

The appropriate green arrow will continuously flash while the lever on the right side of the steering column is moved and the key is turned to ON.

If the green arrow does not come on or if it does not flash, check the bulb and fuse.

NOTE: Both arrows will flash when the Hazard Warning Flashers are switched on.

## Low fuel

If the light comes on when driving, it indicates that the fuel tank is nearly empty.

Due to movement of fuel in the fuel tank, driving on a winding road may cause the light to flicker on and off when the fuel level is getting low.

## 4 Wheel Drive

To check that the bulb is working the light comes on when the ignition is turned to ON. When the engine is started the light will then go out if not in 4WD, refer Chapter 4.

## Oil pressure

To check that the bulb is working, this light comes on when the key is turned to ON - before the engine is started.

Occasionally the light may flicker momentarily when the engine is running. This does not indicate a system problem. However, if the light remains on during normal engine operation it indicates that the oil pressure is dangerously low. Stop immediately and check the engine oil level. If the level is normal, have the system checked at your nearest Holden Dealer. Do not run the engine with this light on, as this could lead to serious engine damage.

## High beam

This light is displayed when the headlight high beams are in use.

## Air bag (if fitted)

To check that the bulb and system is working the AIR BAG light will come on for a few seconds when the ignition is turned to ON.

If the symbol is displayed while driving it indicates that the air bag system may not inflate in an accident and you should see your Holden Dealer.

# *WARNING LIGHTS cont.*

## Battery

To check that the bulb is working, this light is displayed when the key is turned to ON - until the engine is started.

Note that the light may stay on when the engine is idling but should go out when the engine speeds up. If the light comes on while driving a state of "low charge" is indicated. This should immediately be seen to - check for a loose or broken drive belt.

## Brake

**BRAKE**

This light will come on when the park brake is applied and the key is turned ON. The light only indicates whether the lever is up or down, not how well the park brake is applied - always pull the lever as far up as possible. Never drive with the park brake applied.

If this light comes on when you are driving (and the park brake lever is fully down) it indicates that a fault is detected in the brake system. Pull off the road and stop carefully. Remember that

- stopping distances may be longer,
- that you may have to push harder on the brake pedal
- that the brake pedal may go down more than usual.

Check the brake fluid level in the master cylinder. Refer Chapter 7 for information. Note that the warning light does not eliminate the need for the weekly brake fluid level check.

For your safety the vehicle should not be driven when the light is on.

**Diesel only**

If your vehicle has a diesel engine then the light (coming on while driving) could indicate low brake vacuum. Note that depressing the brake pedal repeatedly may cause the brake warning light to come on when the engine is idling. This is because more vacuum is being used than being created. The light should go out when the engine speeds up. If it does not it indicates a fault in the system and you should not continue driving.

## Check engine

**CHECK ENGINE**

Your vehicle is fitted with an Electronic Engine Management System.

To check that the bulb is working, the light comes on when the key is turned to ON, before the engine is started (the light will stay on for a short time after the engine starts).

If the CHECK ENGINE light comes on whilst driving (either intermittently or continuously) it indicates that a fault has been detected in the Engine Management System. Although the vehicle may still be driveable and does not require towing, see your Holden Dealer as soon as possible for an inspection of the System, as continued driving could affect fuel consumption and engine performance.

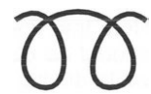
If the engine won't start and the check engine warning light on the instrument panel is flashing, turn the ignition key to OFF for at least 10 seconds before attempting to start the engine again.

## *WARNING LIGHTS cont.*

### Glow plug (diesel only)

Your diesel engine has a special starting system. Turning the key to ON starts the system and turns on the indicator light.

When the glow plugs have heated the engine enough for it to start, the light will go out. This tells you the engine is ready to be started. Waiting time varies considerably with engine and air temperatures.



### Anti lock brake system (if fitted)

To check that the bulb is working, this symbol lights up and goes out when starting the engine.

If the light comes on while driving, carefully stop the vehicle and turn off the engine. Then restart the engine to reactivate the system. If the lights stays on or illuminates again while driving you should have the system checked by a Holden Dealer. Note that this light only means that the *anti lock* system is not operating - your vehicle's brake system will still operate conventionally. Refer Chapter 4.

ABS

### Power drive (auto trans. only)

The POWER DRIVE light will come on when the engine is running and 'power drive' selected, refer Chapter 4.

**POWER DRIVE**

### Winter drive (auto trans only)

The WINTER DRIVE light will come on when the engine is running, 'winter drive' is selected and the transmission T-Bar lever is in "D", refer Chapter 4.

**WINTER DRIVE**

## *WARNING LIGHTS cont.*

### Seat belt

When the key is turned to "ON" or "START", a reminder light is designed to come on for 4 to 8 seconds, reminding occupants to fasten their seat belts.

### Check Trans (auto transmission only)

To check that the bulb is working, this light is displayed when the key is turned to ON.

CHECK TRANS

Note that if the light flashes it means that the computer controlling the transmission has found a problem. The vehicle can still be driven when the light is flashing, but the computer may put the transmission into 'safety mode' (refer Chapter 4) - the transmission should be checked by your Holden Dealer as soon as possible.

### Automatic transmission oil temp (auto transmission only)

The indicator light should turn on when the ignition switch is turned to the ON position, but should go out after a few seconds.

A/T OIL TEMP

If the light comes on while driving it indicates that the automatic transmission fluid temperature is high.

You should stop as soon as it is safe to do so, leave the engine idling and the T-bar lever in "P". If the light does go out then you may resume driving. If the light does not go out you should have the transmission checked by a Holden Dealer as soon as possible.

Note that if the light comes on while you are driving at high speed, ensure that the transfer lever is set to 2H and the *free* wheel hubs are set in the *free* position, refer chapter 4, "Driving".

### Cruise main (if fitted)

The CRUISE MAIN light will come on when the cruise control switch is turned to the ON position, refer CRUISE CONTROL, later in this Chapter.

CRUISE MAIN

### Cruise set (if fitted)

The CRUISE SET light will come on when the cruise control is maintaining vehicle speed, refer CRUISE CONTROL, later in this Chapter.

CRUISE SET

# WIPERS AND WASHERS

NOTE: Wipers and washers are operational when the key is turned to ON.

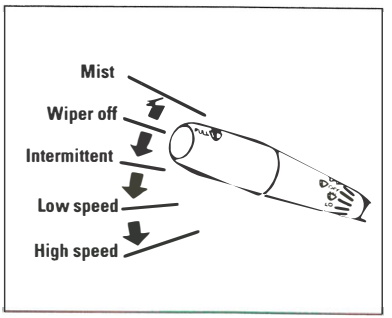
## Windscreen wiper and washers

The windscreen wipers and washers are controlled by the lever located on the left of the steering column.

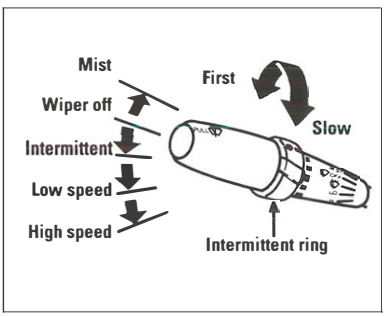
Do not operate the wipers if the windscreen glass is dry as they may scratch the glass. To obtain a spray of water onto the glass, pull the lever towards you and hold as long as required.

When the lever is shifted down to the INT position, the wipers operate every 3 to 4 seconds. When the lever is moved past the INT position to the LO position the wipers operate at normal, low speed. When the lever is moved to the HI position they will sweep at high speed. If the lever is moved upwards, past the OFF position to MIST, the wipers will operate only as long as the lever is held up.

Always clear ice or snow from the wiper blades before using the wipers.



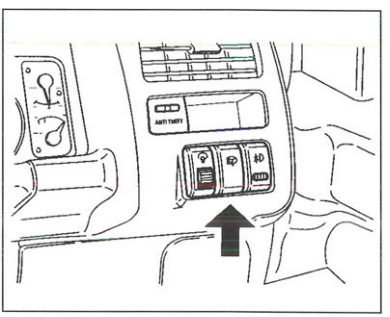

**Variable intermittent (if fitted)** The frequency of intermittent wipe can be varied by moving the intermittent ring when the lever is in the INT position. The time between wipe swings can be adjusted between 2 and 20 seconds, approximately.




## Headlight washers and wipers (if fitted)

The wiper/washer switch is located on the instrument panel, to the right of the steering column.

The washers and wipers operate for a short time whenever the switch is pressed.

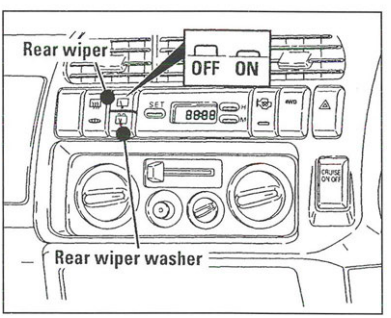


## Rear wiper and washer

The rear wipe/wash switch is located on the instrument panel, to the left of the steering column.

Do not operate the wiper when the window is dry. It may scratch the glass. Do not operate the wiper if it is caked with snow or frozen as it may damage the wiper system.

To turn the intermittent speed wiper on, push the wiper switch. Push the wiper switch again to turn the wiper off. To wash and wipe simultaneously, push the washer switch. The washer and wiper will operate only as long as the switch is held in.



# HEADLIGHTS AND TURN SIGNALS

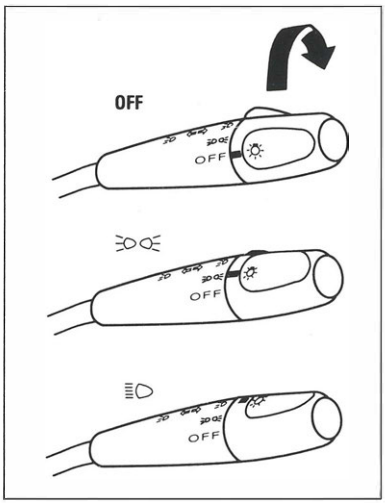
## Park lights/head lights

The lever controlling the lights is located on the right of the steering column.

Rotate the end of the lever to the first 'stop' to turn on the park, tail, rear licence and instrument panel lights. Turning the knob further, to the second stop, also turns on the headlights.

A buzzer will sound when the key is in either the "ACC", "OFF" or "LOCK" position and the driver's door is opened with the headlight switch in the "ON" position. This will remind you to turn the headlights off.

Never leave the headlights on for any length of time when the engine is not running or you will flatten the battery.




## Headlight high/low beam

With the headlights on, pull the lever towards you, until you feel a click, then release. The headlights will change between low and high beam, or vice versa. When the high beams are in use, a blue light on the instrument panel will glow.

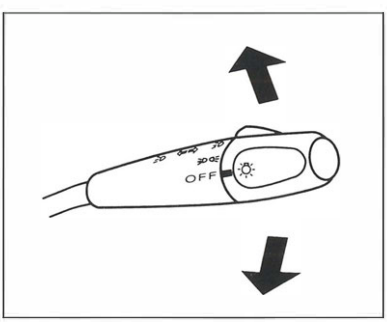
It is also possible to flash the high beams for signalling purposes (even if the headlights and/or ignition are switched off) by pulling the lever towards you; the lights will remain in high-beam as long as the lever is held. Note that this also changes the headlights between high and low beam when the lever is released.

## Turn signals

Push the lever up to signal a left turn and down to signal a right turn. The lever will return to the neutral position when the turn is completed.

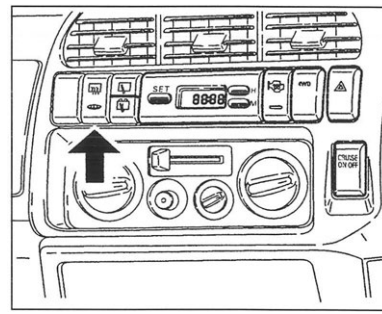
In some turns (such as changing lanes) the steering wheel is not turned far enough to cancel the turn signal. So, to indicate a lane change, move the lever part way and hold. The lever will return to the neutral position when released.

A green arrow on the instrument panel will flash when the lights are in operation.



# DEMISTER, DIMMER AND HAZARD

## Rear window demister



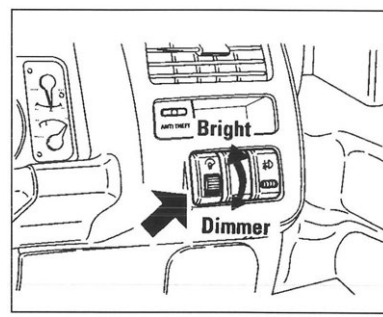

The demister switch is located on the instrument panel, to the left of the steering column.

Depress the switch to turn on the rear window demister. The indicator light in the switch glows when the demister is in use, i.e. ignition and demister turned ON.

To avoid flattening the battery, turn the demister off by re-pressing the switch when the window becomes clear.

On some models an automatic timer will turn off the demister after 30 minutes.

## Instrument dimmer

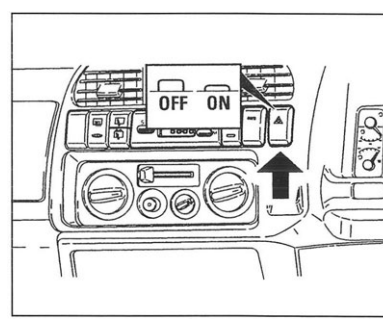



The instrument lights turn on when the park or headlights are turned on.

Brightness of the instruments is controlled by the thumb wheel, located to the right of the instruments.

Turn the wheel up for brighter, down for dimmer.

## Hazard warning flasher




The red hazard knob is located to the left of the instruments.

Turn on the hazard warning flasher (regardless of the ignition key position) by pushing the knob.

To turn off, push the knob again.

Use the hazard warning flasher to warn other drivers any time your vehicle becomes a traffic hazard, day or night.

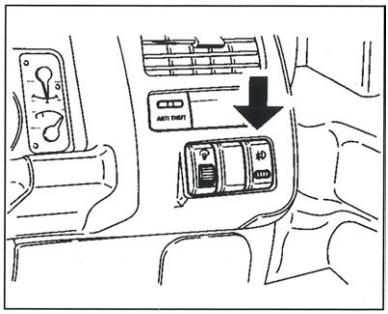
USE OF THE HAZARD WARNING SYSTEM WHILE THE VEHICLE IS MOVING IS PROHIBITED BY LAW IN SOME STATES.

# FOG LIGHTS

## Fog lights (if fitted)

When fog or heavy mist reduce vision, push this switch to turn the fog lights on.

The fog lights will operate separately to the headlights. The indicator light in the switch glows when the fog lights are in use.

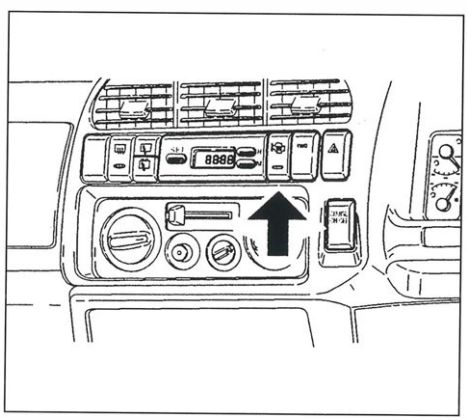


## Diesel quick warm-up switch

When the outside temperature is below 15 degrees and the engine temperature is below 80 degrees, depress the switch to operate the engine quick warm-up system.

The indicator light comes on when this switch is in use.

The system will deactivate automatically, or can be deactivated with the switch.



# HORN, TILT STEERING, IGNITION

## Horn

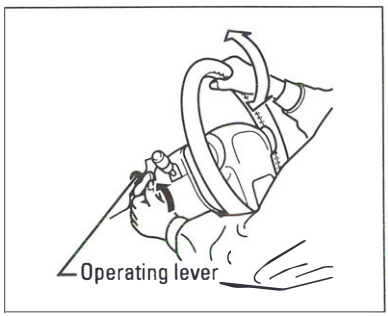
The horn is activated when one of the pads, located on either side of the steering wheel, is pressed.

## Tilt steering (if fitted)

The tilt steering lever is on the left side of the steering column.

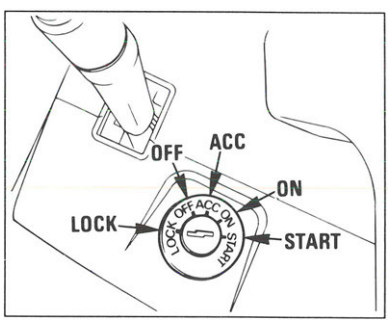
To adjust, lift the lever to unlock the steering column. Move the wheel up or down, as required, and lock the lever firmly. Then, try moving the wheel up and down to ensure it is securely locked. The tilt steering wheel adjustment lever has 6 adjustment positions.

For your safety, do not adjust tilt steering while driving.




## Ignition / starter switch

LOCK Normal parking position. Accessories and engine are off. This position locks the ignition and steering when the key is removed. The key can only be removed at this position. To release the steering lock, insert the key into the switch and turn it to "OFF" or other positions. If you have trouble turning the key to unlock the steering, turn the steering slightly to the right or left while twisting the key clockwise.




OFF The engine and accessories can be turned off without locking the steering.

ACC (accessories) The engine is off but accessories such as the radio still operate. To avoid flattening the battery, avoid excessive use of accessories when the engine is not running.

ON This is the position at which the engine is ready to start and all electrical systems are active. Do not leave the switch in the "ON" position for a prolonged period, unless the engine is running, otherwise the battery will discharge.

START This is the position for starting the engine. The key should be released from this position as soon as the engine starts.

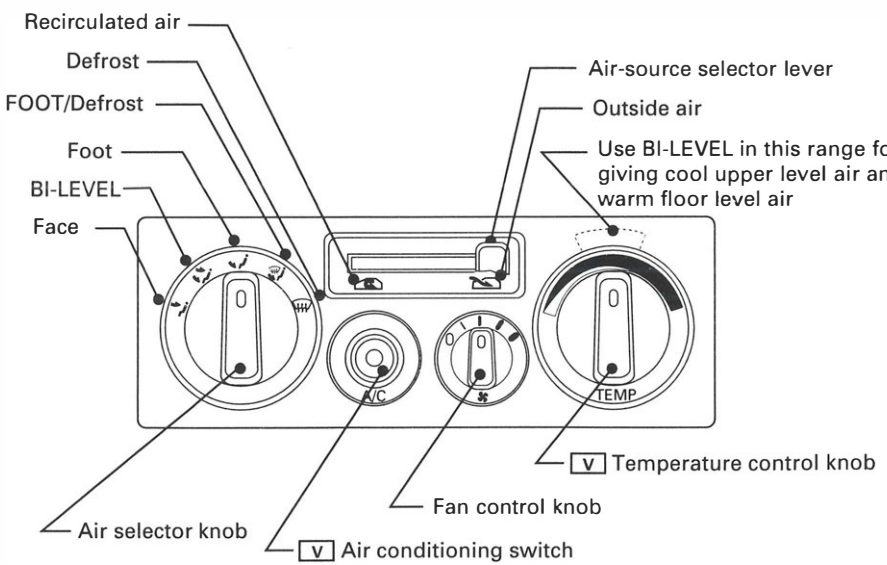
**CAUTION:** Do not turn the engine off while the vehicle is in motion as this renders ineffective any power assisted equipment (such as brakes or steering) operated by the engine. Never remove the key while the vehicle is in motion as this will lock the steering of the vehicle.

# VENTILATION SYSTEM

The vehicle features a flow-through ventilation system for your comfort. Under reasonable conditions, it shouldn't be necessary to open the windows at any time. Fresh air (when selected by the Air Source Lever) is drawn into the vehicle through the grilles in front of the windscreen. Do not allow them to become clogged with debris, such as leaves or snow.

## Outlets

The five upper face level outlets, located in the dash, have adjustable vanes which may be swivelled up/down and left/right to allow directional control of air flow. Knee level outlets are vertically adjustable. The other outlets are fixed, as these direct air to the windscreen or feet in the best possible way.



# HEATER CONTROLS

## Air conditioning switch (if fitted)

Push the switch to turn on the air conditioning. The indicator light in the switch glows when the air conditioning is operating. Note that the fan must be switched to 1 or greater for the air conditioning to work.
Push the switch again to turn off the air conditioning and achieve better fuel consumption.

## Fan knob

The fan knob provides speed control of the blower fan: 0 (off), 1, 2, 3, 4.

## Temperature knob

The temperature knob regulates the temperature of the air entering the passenger compartment. Turn the knob clockwise for warmer air, anti-clockwise for cooler air.

## Air source lever

Re-circulated or outside air intake can be selected with the Air Source Lever. The re-circulation position should be used (with the windows closed) when outside air is not wanted, as when driving in dusty conditions.
**However, the re-circulate position should not be used for extended periods of time, as no outside air is admitted into the vehicle.**

## Outlets selector knob

The air selector knob allows you to select different outlet combinations for the air entering the cabin of the vehicle.

Air is delivered from the face level outlets.

Provided the temperature knob is moved away from extreme hot or extreme cold, cooler air is delivered from the face outlets and warmer air from the feet outlets. This position is useful in cool weather with bright sunshine.

Air is deliver from the floor outlets.

Air is delivered from the demister and floor outlets.

Air is delivered from the demister outlets.

# AIR CONDITIONING (if fitted)

## Hot weather

For a "quick cool down" when first entering the vehicle on a hot day, switch on the air conditioner, select *re-circulate*, move the temperature knob to full cold and turn the fan to a high speed. Also open the windows to allow the hot air to escape. Close the windows after a minute or two as the air conditioning works more effectively with the windows up.

It is recommended that when the interior cools down (approximately 10 to 20 minutes) to select outside air (rather than re-circulate) to achieve and maintain best comfort conditions during extended driving.

The coolest temperature however, is achieved when *re-circulate* is selected. This can be used in slow city traffic or when the vehicle is stationary in very hot weather. Occasionally select *face* or *face and foot* to allow outside air to enter the vehicle.

## Dust

When following another vehicle on dusty roads, or to prevent exhaust fumes or odours from entry into your vehicle, select the re-circulate position of the air source lever and make sure windows are closed.

When driving on un-sealed roads but where the dust is not airborne, use the fresh air setting of the air source lever (with the windows closed) and the fan preferably on a high speed so that positive air pressure in the vehicle will prevent any dust entry.

## Cold weather

The air conditioner also removes moisture from the air. By moving the temperature knob away from extreme cold ensures that the air will be reheated after it has been purified.

Therefore, if the side windows or windscreen fog up on a cold day, switch on the air conditioner, turn the fan knob to a high speed, select 'demist' and select a warm setting with the temperature knob. This will circulate warm, dehumidified air throughout the vehicle, defogging the windows.

## Fuel consumption

When air conditioning is not needed, remember to turn the air conditioner off, as this will reduce fuel consumption.

## Automatic transmission

If your vehicle is stopped for long periods in hot weather with the engine running and the air conditioner operating, select N (neutral) or P (park).

## Important

Once every two weeks, with the engine running, switch the air conditioner on for 5 to 10 minutes, even in Winter. This will lubricate the air conditioning system and prevent the seals from drying out.

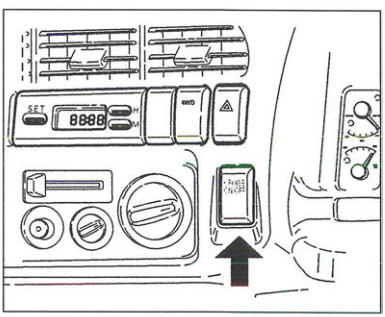
# CRUISE CONTROL (if fitted)

The cruise control can keep the vehicle at a constant speed, so that the driver does not have to use the accelerator pedal.

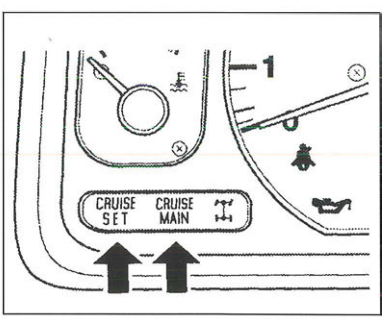
This is useful when driving on an open road where frequent deceleration and acceleration are not required. The cruise control speed cannot be set below 36 km/h For your safety, do not use the cruise control when driving in heavy traffic or winding roads.

## SETTING A DESIRED SPEED

Push the top part of the main cruise control switch; the CRUISE MAIN light on the instrument panel will come on. This light indicates that the cruise control is ready.




Use the accelerator pedal to gain required speed and push (once) the set/coast button on the end of the cruise control lever. You can then remove your foot from the accelerator pedal. The vehicle speed will then be maintained by the cruise control; the CRUISE SET light on the instrument panel will also come on, to indicate that the cruise control is now maintaining vehicle speed.



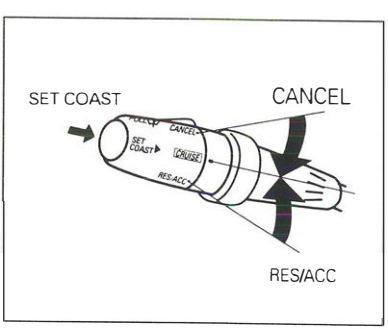

## ACCELERATING

If you wish for a short burst of speed (passing a car) use the accelerator pedal. When you take your foot off the pedal, the vehicle will slow down to the speed set before passing.

## RESETTING TO HIGHER SPEED

If you wish to increase the cruise control speed you may either:-

(a) rotate the end of the lever to *resume/accel* for less than 1 second. This is known as 'tap up'. Each time you rotate the switch to this position for less than one second the cruise control speed will increase by 1.6 km/h. Tap ups are limited to 10 consecutive times.



# CRUISE CONTROL (if fitted)

(b) rotate the end of the lever to *resume/accel* and hold for more than one second. The cruise control speed will increase until you release the lever.

(c) use the accelerator pedal to increase vehicle speed, push in the *set/coast* button on the very end of the lever (for less than one second) then release.

## RESETTING TO A LOWER SPEED

If you wish to decrease the cruise control speed you may either:-

(a) depress the *set/coast* button for less than one second. This is known as 'tap down'. Each time you depress this button the cruise control speed will decrease by 1.6km/h. If you tap down to lower than 36 km/h the cruise control will be disconnected.

(b) depress and hold the *set/coast* button. Wait until the vehicle slows to the desire speed, then release the button. If you coast down to lower than 36 km/h the cruise control will be disconnected.

## STOPPING CRUISE CONTROL

If, while the vehicle speed is maintained by the cruise control, you:

(a) depress the brake pedal

(b) depress the clutch pedal (manual transmission)

(c) shift the transmission lever to N (automatic transmission)

(d) turn the end of the cruise control lever to the CANCEL position

(e) use the *set/coast* button to bring cruise control speed below 20 km/h

(f) when cruising speed is lower than preset speed by 20km/h the cruise control will stop controlling the vehicle speed. However, the memory will store the last set speed. To resume this speed, use the accelerator pedal to bring vehicle speed to at least 36 km/h, then rotate the end of the cruise control lever to *resume/accel* for less than one second. Note: if the switch is held for more than one second the memory will be erased and the cruise control will be in the *accel* mode (the speed will increase until you release the switch).

To completely switch off the cruise control you may either:-

(a) depress the lower part of the main switch to the OFF position

(b) turn the ignition key to OFF

(c) or if the cruise control system senses trouble in the system
Note that when going up steep hills it may be difficult for the cruise control to maintain a constant speed, in which case if may cancel itself.

## *CRUISE CONTROL (if fitted)*

### WARNING

DO NOT USE THE CRUISE CONTROL WHEN ROAD OR DRIVING CONDITIONS COULD REQUIRE VARYING SPEEDS. A CONSTANT SPEED MAY NOT BE PRACTICAL IN HEAVY OR VARYING TRAFFIC, OR ON WINDING, SLIPPERY OR ROUGH ROADS. KEEP THE MAIN SWITCH IN THE OFF POSITION UNLESS USING THE CRUISE CONTROL.

WITH MANUAL TRANSMISSIONS, NEVER ATTEMPT TO MOVE THE GEAR LEVER WITHOUT USING THE CLUTCH PEDAL WHILE THE CRUISE CONTROL IS MAINTAINING VEHICLE SPEED. ENGINE OVER-REVVING AND DAMAGE MAY RESULT.

REMEMBER THAT TAKING YOUR FOOT OFF THE ACCELERATOR WHEN THE CRUISE CONTROL IS ENGAGED WILL NOT REDUCE VEHICLE SPEED. WHEN GOING UP OR DOWN HILLS (PARTICULARLY WHEN TOWING) IT IS POSSIBLE FOR THE VEHICLE TO GAIN OR LOSE SPEED, EVEN THOUGH THE CRUISE CONTROL IS ENGAGED. IF THIS HAPPENS WHILE GOING UP HILL, MERELY DEPRESS THE ACCELERATOR PEDAL TO MAINTAIN THE SPEED DESIRED. IF GOING DOWN A HILL, STEEP ENOUGH TO CAUSE THE VEHICLE TO GAIN SPEED, DEPRESS THE BRAKE PEDAL, WHICH WILL BOTH DISENGAGE THE CRUISE CONTROL AND SLOW THE VEHICLE DOWN.

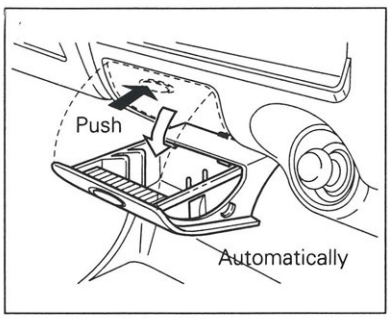
IF A MALFUNCTION HAS DEVELOPED IN THE CRUISE CONTROL SYSTEM, HAVE THE SYSTEM CHECKED AND CORRECTED AS SOON AS POSSIBLE BY A HOLDEN DEALER.

# CIGARETTES, GLOVEBOX, RADIO, CLOCK

## Cigarette lighter

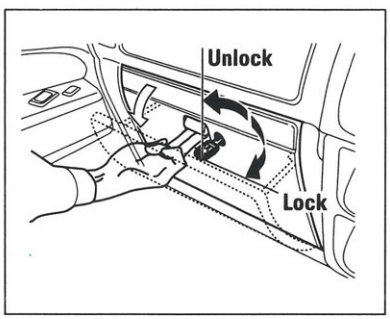
Located beneath the heater, the cigarette lighter is operational with the key in either the ON or ACC positions. To use, press in the lighter knob. When the element is hot the lighter will automatically pop out, ready for use. To avoid damage to the lighter, don't hold the lighter pushed in by hand.

## Ash tray




The front ash tray is located to the left of the cigarette lighter. Push the ashtray to open; it will slide open automatically. Push back in again to close. It is recommended that the ashtray be closed after use and that it be regularly cleaned out, by opening and pulling out the tray.
Refer Chapter 2 for rear ash trays.

## Glovebox

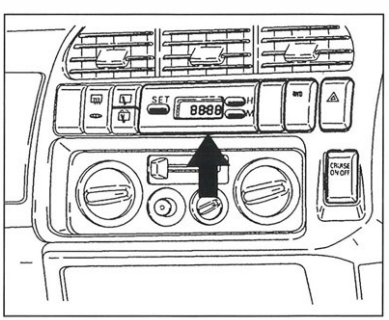



The glovebox can be opened by pulling the handle. Push the lid shut to close.
To lock, turn the key clockwise, to unlock, turn the key anti-clockwise to the vertical position.
To unlock and open at the same time, turn the key anti-clockwise, past the vertical position.
The key must be vertical in the lock in order to withdraw the key and leave the glovebox unlocked.

## Radio / cassette

Refer to the operating instruction supplement in your glovebox for all information relating to the operation of your radio/cassette.
Note that after repeated playing, residue from the tape surface and dust from surroundings builds up on the tape head and tape handling surfaces. This is first noticed as lack of treble and a muffled sound. To assist good quality sound and trouble free operation, a good quality cassette head cleaning tape should be used every month or two, depending on use.

## Clock (if fitted)



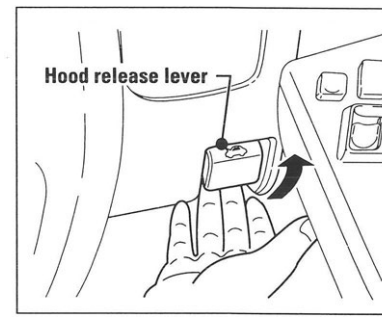

Time is displayed when the key is turned to *ON* or *ACCESSORIES*.
**H** Hour display is advanced rapidly while this button is held de-pressed or display increases by one hour each time the button is pressed.

**M** Minute display is advanced rapidly while this button is held de-pressed or display increases by one minute each time the button is pressed.

**SET** When the SET button is pressed the time is rounded off to the closest hour.

## *BONNET RELEASE*

To open the bonnet, pull the lever inside the vehicle (beneath the dash) towards you.




This allows the bonnet to release but is prevented from opening by the safety catch. To open completely, reach in under the centre of the bonnet and squeeze the safety catch upwards. Fully open the bonnet and insert the support rod in the slot provided. For closing, return the support rod to its resting position and lower bonnet gradually to be finally dropped under its own weight.

Always check to be sure that the bonnet is closed by attempting to lift the bonnet.

## Notes

CHAPTER 2

# Locks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| 2-3 | Door locks |
| 2-3 | Child proof door locks |
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| 2-6 | Tailgate lock |

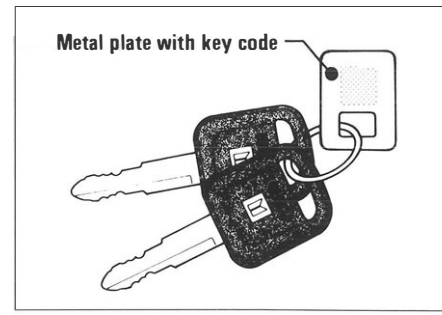
# *KEYS & LOCKS*

## Keys

Two keys are provided with the vehicle. The key code number is stamped on the metal plate attached to the key.

For vehicle security, remove the metal plate and keep the number in a safe place - NOT IN THE VEHICLE.

In the event of the original keys being lost a duplicate can be made by your Holden Dealer, using your key code number.




## Fuel filler release

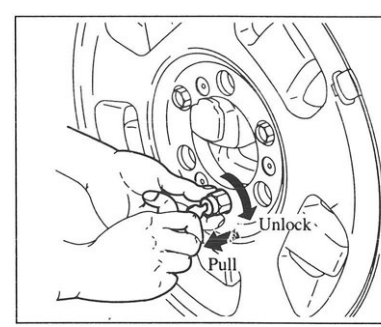
To release the fuel filler flap, pull up the lever located between the front seats.

Refer to information on in Chapter 5 when refuelling.

## Spare wheel lock (if fitted)

To unlock: Insert the key into the wheel lock. Grip the wheel lock with your hand. Turn the key clockwise while pulling out the wheel lock. The wheel lock comes out and is released.

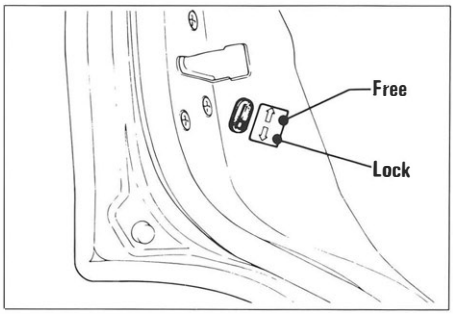
To lock: Insert the key into the wheel lock and push into place. Then, turn the key anti-clockwise while pulling out.



# DOOR LOCKS

## Child proof (if fitted)

This added safety is built into the two rear passenger doors.
The locks are provided on the rear edge of rear doors, accessible when the door is open.
To operate, push the lever down as far as it will go and close the door. The door cannot now be opened from inside, regardless of the lock button position. To disengage, open the door from outside and push the lever up as far and is will go.




**CAUTION:** For safety, you should check that the lock is operating correctly, after setting, by attempting to open the door from the inside.

## Manual door locking (side doors and rear door)

When leaving the vehicle:

- Doors can be locked or unlocked with the ignition key. To open doors, unlock with key then pull out the door handle.
- To lock doors without using the key, push down the lock button (inside the vehicle) then close the door while holding out the door handle.

When remaining inside the vehicle:

- Push the lock button down to lock the door, pull up to unlock.

## Electric door locking (if fitted)
### (keyless entry)

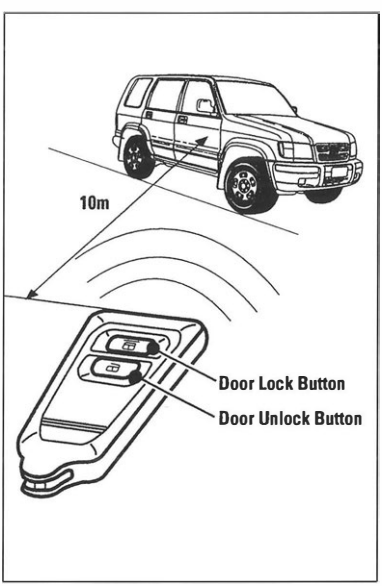
**Unlock**: Press the "unlock" button of the remote control within 10m of the vehicle.

**Lock**: Press the "lock" button of the remote control within 10m of the vehicle.

**The remote control**

The remote control is effective within a 10m radius of the vehicle. However, this distance may be varied depending on the surrounding conditions, such as in areas of high radio activity.

The remote control is powered by a lithium battery, which should last for at least two years, with normal use. A weakening battery is indicated by a progressive "loss of range", which means you must be closer to the vehicle when pressing the remote control. *Tinting the vehicle's windows will reduce the range of the remote control if the tinting material has a metallic film.*



# *ELECTRIC DOOR LOCKING (if fitted) cont.*

## The remote control, cont.

Care should be taken of the remote control. It should not be or soaked, exposed to direct sunlight (such as on the dash where it will be heated) or shocked.

Remote control locking and unlocking will not work if a door is open.

## Answer back function:

When the doors are unlocked by remote control, the front marking lights and parking lights flash twice. The dome light comes on. The dome light will remain on for 30 seconds if the doors are not opened or relocked.

If either door is opened and closed, the dome light will turn off. It will also turn off if the door is relocked (either with the key or by remote control) within 30 seconds.

When the doors are locked by remote control, the front marker lights and parking lights flash briefly. To check that the doors are locked, press the remote control button again (within 5 seconds of pushing it the first time). The marker lights will flash briefly and the horn will chirp.

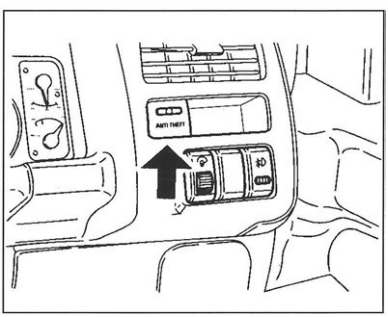
"Answer back" can be disabled or enabled by your Holden Dealer, if required.

# ANTI THEFT (if fitted)

When the vehicle doors, tailgate and bonnet are locked, the anti-theft alarm system is designed to protect your vehicle and valuables from theft.

Any attempt to forcibly open a door, the tailgate or bonnet without using the ignition key (or remote control) will cause the hazards to flash on and off and the horn to beep for 30 seconds. The ignition/starter will also be disabled. If the anti theft system is *not* switched off while the alarm is sounding the system will automatically switch off after 30 seconds - to avoid flattening the battery. For further theft control the anti theft system will have to be re-activated.

## To activate the system




1. After ensuring the bonnet is closed, lock all doors (and tailgate) with the remote control or ignition key.

   The ANTI-THEFT light on the dash will come on.

2. After approx. 10 seconds, the ANTI-THEFT light will switch off - the system is now in operation.

## To deactivate the system

Unlock the doors or tailgate with the remote control or the ignition key

*or*

insert the ignition key in the ignition/starter and turn the switch to ACC position.

## The alarm is triggered...

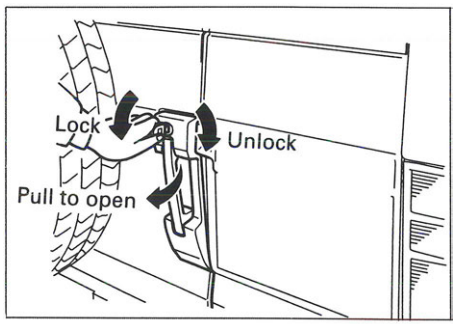
- If someone attempts to open a door without using the remote control or key.
- If someone forcibly attempts to pry open a door, tailgate or bonnet.
- If someone forcibly attempts to remove a door lock cylinder.
- If someone unlocks a door with the door lock knob (e.g. they were locked inside the vehicle or reaching through an open window)
- If the bonnet release lever is moved.

Note: When the ignition key is turned to OFF, LOCK or is removed from the ignition, opening any door will cause the ANTI-THEFT light on the dash to flash as a *reminder* to lock the doors. If ignored the light will switch off after 30 secs.

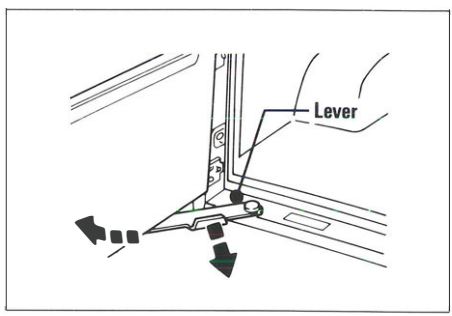
# TAILGATE LOCKS

The tailgate may be locked or unlocked in the same way as the side doors, either with the ignition key or the lock button.

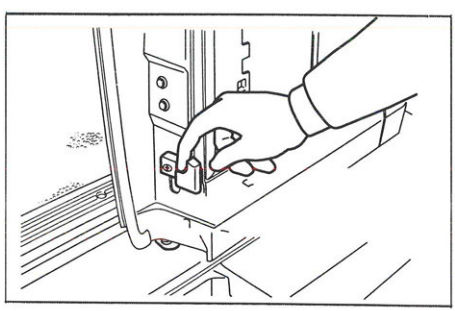
If electric locking is fitted, the tailgate will lock and unlock in conjunction with the side doors, refer previous page.




When opening the left side of the tailgate, pull out until the lever locks in position.

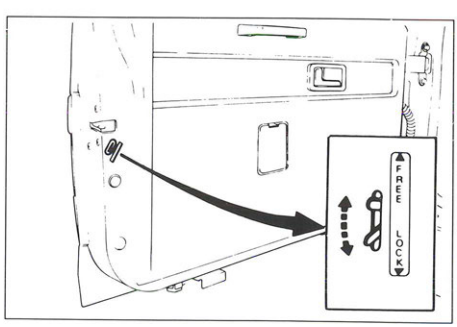



To close, push the tailgate out slightly and pull the lever towards you.



The child proof safety lock is built into the tailgate. To operate, push the lever down as far as it will go and close the tailgate. The tailgate cannot now be opened from inside, regardless of the lock button position. To disengage, open the tailgate from outside and push the lever up as far and is will go.

**CAUTION:** For safety, you should check that the lock is operating correctly, after setting, by attempting to open the tailgate from the inside.



CHAPTER 3

# Body features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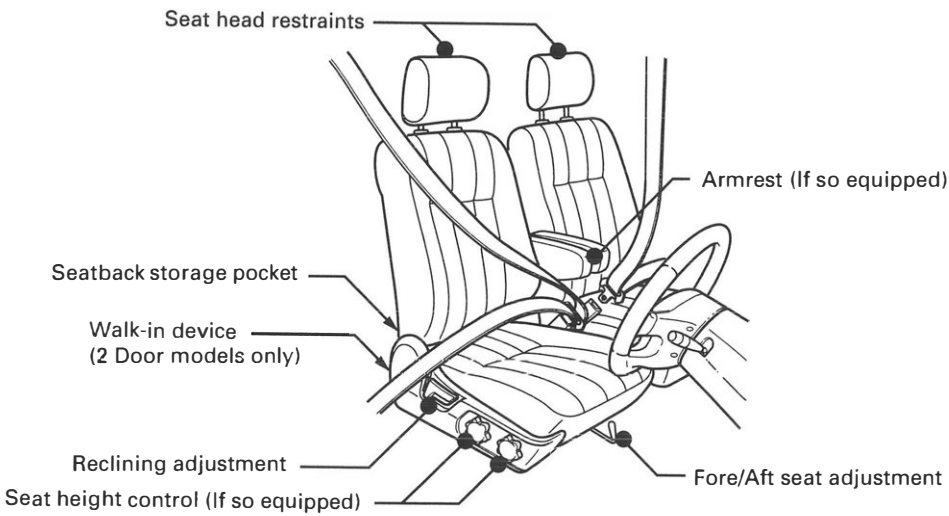
3-18 Card holder
3-19 Accessory socket
3-19 Park brake

# FRONT SEAT ADJUSTMENT




## Fore/aft

Turn the lever (at the front of the seat) to one side and move the seat forward or backwards as required. After adjusting the seat position, try to move the seat forward and backward to be sure the seat adjusters have been latched.

*Do not adjust the driver's seat while the vehicle is moving.*

## Reclining

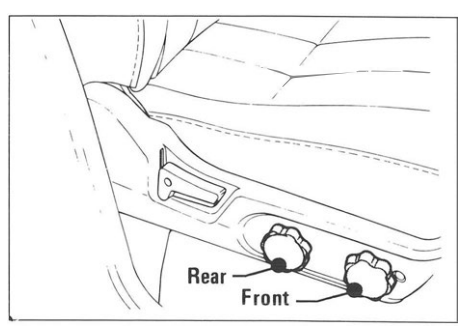
The angle of the back of the seat can be adjusted by raising the lever on the door side of the seat.

To avoid reducing the effectiveness of seat belts, seats should only be semi-reclined when the vehicle is moving. The fully reclined position should only be used when the vehicle is stationary.

## Seat height control (if fitted)

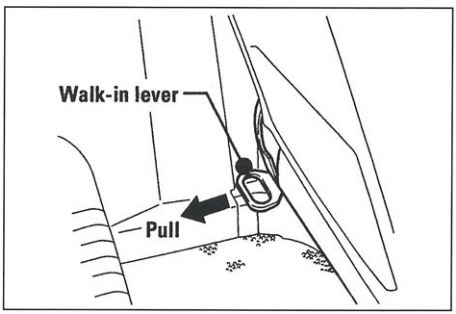
The two knobs on the door side of the seat control the height.

The front knob moves the front of the seat cushion up or down, the rear knob moves the rear of the seat cushion up or down.



# FRONT SEAT ADJUSTMENT

## Passenger seat (2 door models only)

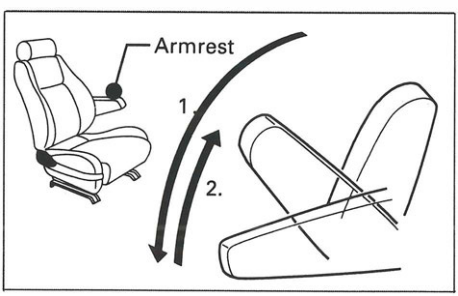



On the passenger side, the back of the seat slides all the way forward as the reclining lever is pulled up, making it easier for rear seat occupants to enter.

To exit the rear seat, pull the 'walk-in' lever, located on the back of the front passenger's seat

**WARNING:** To avoid injury, be sure that rear seat passengers keep their feet clear of the front seat when returning the front seat to its upright position. Carefully follow the instructions.

## 'Captain seat' armrest (if fitted)

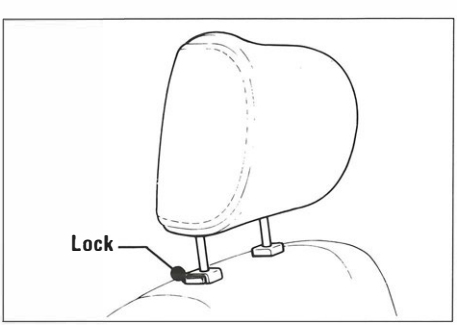



Armrests for the inner sides of the front seats may be used when horizontal or folded upwards vertically, when not required.

1. Lower the armrest all the way.
2. Raise the armrest a little at a time to adjust the angle to suit.

*Raise the armrest before opening the centre console.*

## Head restraint

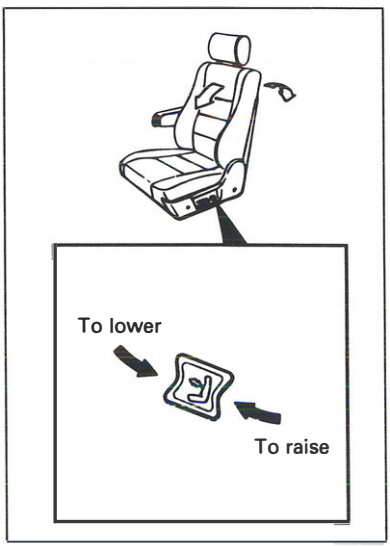



This safety feature is not intended as a head rest. It is solely for the reduction of possible injury that may result from a whiplash neck movement following a vehicle collision. Do not drive the vehicle with the head restraint removed.

Pull the head restraint up to raise the height. To lower the head restraint, first squeeze in the lock button.

# POWER SEAT (if fitted)

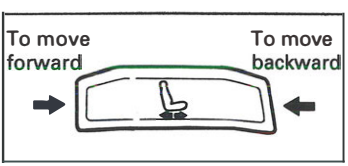
Ensure hands and feet are clear when adjusting the seats. Also ensure nothing is in the way of the seats when they are being adjusted, including seat belts and belt buckles. Do not adjust the driver's seat while the vehicle is moving.




## Reclining (both front seats)

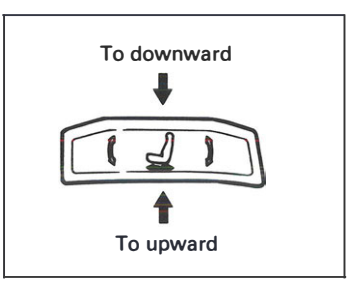
The seat backs can be tilted forward or backward by moving the switch as illustrated, located on the door side of each front seat.

*To avoid reducing the effectiveness of seat belts, seats should only be semi-reclined when the vehicle is moving. The fully reclined position should only be used when the vehicle is stationary.*




## Fore / aft (both front seats)

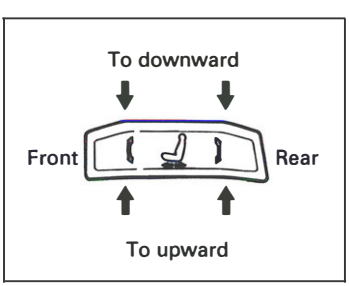
Each front seat can be moved forwards or backwards with the switch on the door side of each front seat. Move the switch forwards or backwards as required.




## Height control (driver's seat)

The driver's seat can be adjusted in height. Push the switch down to lower the seat or up to raise the seat.

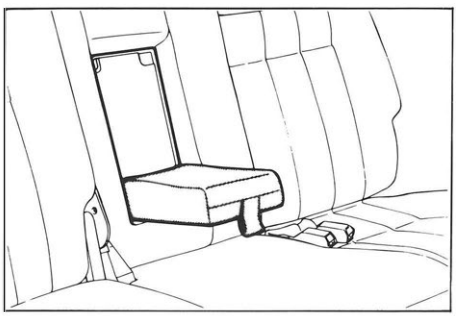
In addition, the front or rear part of the seat can be independently raised or lowered. Tilt the front of the switch up or down to raise or lower the height of the front part of the seat. Tilt the rear of the switch up or down to raise or lower the height of the rear part of the seat.



# SEAT ADJUSTMENT

## Rear seat armrest

On some models, a rear seat armrest is provided. Reach in and pull down the armrest if required.



## Rear seat head restraint

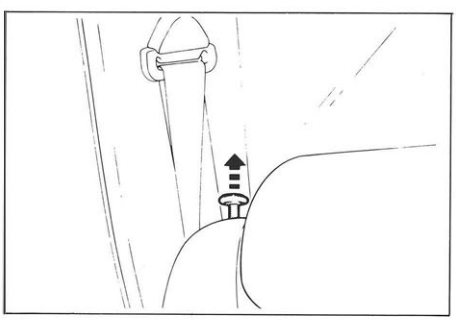
Some models are fitted with adjustable *rear* head restraints. Pull up or push down to adjust the height, as required.

## Recline/incline rear seat (if fitted)

Pull up the release knob(s) and move the back of the seat forwards or backwards. Releasing the knob locks the seat in position.

On some models, the back of the seat may either be folded fully down or may be reclined back to one of 10 positions, anywhere from fully upright to 40° backwards.

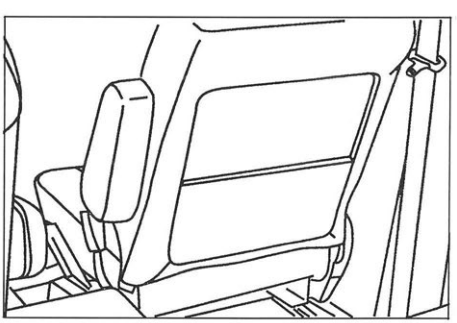
To avoid reducing the effectiveness of seat belts, seats should only be semi-reclined when the vehicle is moving. The fully reclined position should only be used when the vehicle is stationary.



## Seat back storage pocket

The front seat back storage pocket is provided to store small items.

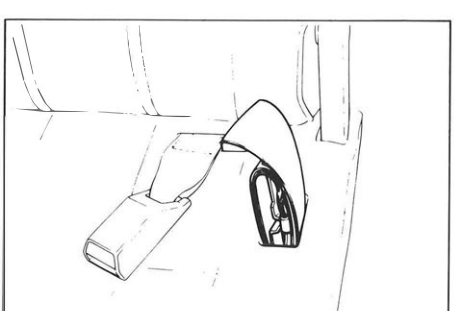
Whenever possible loose items should be secured, as they can become flying projectiles in accidents.



## Buckle stowage (if fitted)

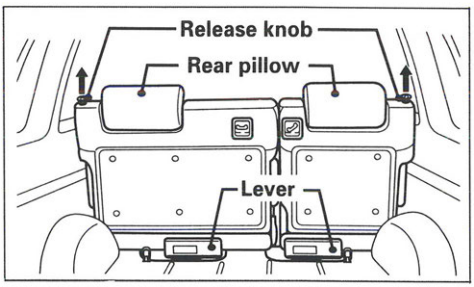
Some models are provided with stowage pockets in the sear seat to tuck away the rear seat belts.

Roll the seat belt webbing around the buckle and tuck into the hole.



# FOLDING REAR SEAT

## Folding seat back (if fitted)



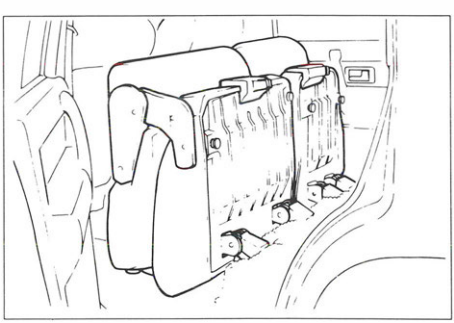

1. Ensure rear pillow is in the lowest position.
2. Ensure seat belts are out of the way.
3. Pull up the release knob on the top of the seat back.
4. Fold the back of the seat forwards.

   Note that some models have a split rear seat, which means that either one side or both sides of the seat back may be folded forwards. Remember to first tuck away the centre arm rest.

The release knob must be pulled up when returning the seat to the upright position.

WARNING: To avoid injury, be careful not to hit your head on the folded third seat, when and while sitting in the rear seat in its reclined position.

## Converting rear seat

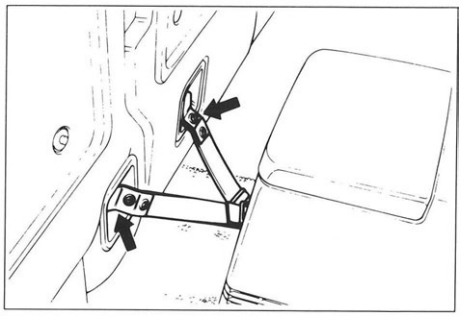


In addition to folding the back of the seats forward, with some models, the whole of the rear seat assembly may be folded forward. In addition, some models are fitted with split rear seats which allows you the option of converting either one or both sides of the seat.

1. Fold the back of the seat forward as described above.
2. Push down and undo the lever located at the back of the rear seat cushion. At the same time lift the rear seat and push forward, until in the vertical position.

## ***FOLDING REAR SEAT cont.***

3. Remove the cover at the rear of the console to reveal the anchor strap(s) that are attached to the rear of the console. Split seats have two bands (the shorter band is for the right seat, the longer band for the left), non-split seats have one band. Attach the free end of the band(s) to the clasp on the back of the seat back. The bands are adjustable in length.



Do not permit anyone to ride in the rear of the vehicle while the seat is folded down. All occupants should be properly restrained by a seat belt while the vehicle is moving.

After restoring seat to upright position, check to ensure seat is securely locked into place.

When folding the second seat, be sure not to fully open the centre console box.

WARNING: To avoid injury, take care of your hands and feet when folding/ converting seats.

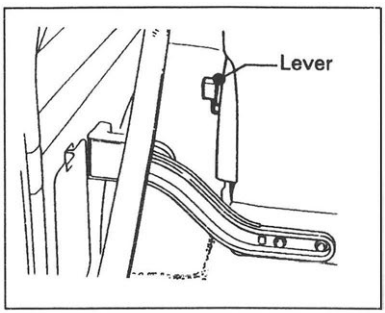
# THIRD ROW SEATS (if fitted)

The third row seats are suitable for one person on each seat position; each position being supplied with its own seat belt. When not required for use one, or both seats, may be folded away to gain more space.

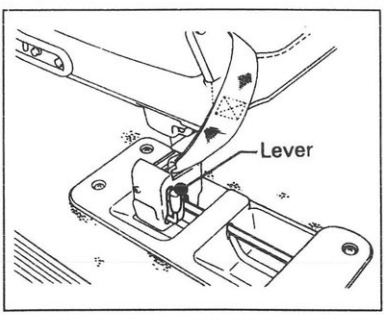
CAUTION: To avoid injury, take care of your hands and feet when folding/ unfolding seats. Carefully follow the instructions.

## Folding

Push the lever at the side of the seat forward and at the same time, push the seat back to fold it down to the seat cushion.




Move the lever at the leg of the seat (where it attaches to the floor) down towards you, to unlock the seat leg.



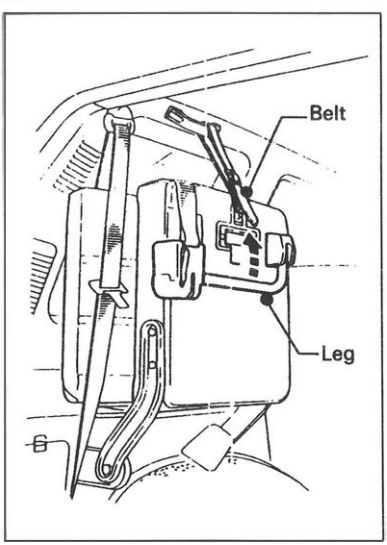

Fold the seat sideways, up towards the window and strap it tightly into the hand grip, folding the leg down flat against the seat.

## Unfolding

Unfolding is reverse of folding away:

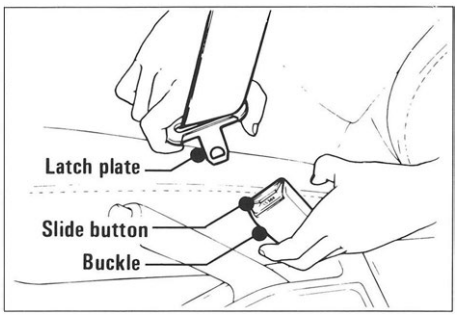
- undo the strap from the hand grip
- unfold the seat leg
- lower the seat and clip the leg firmly into floor
- move the lever on the side of the seat while returning the seat back to the upright position.

Always ensure the seat leg is firmly attached to the floor and the seat back is locked upright.



# SEAT BELTS

## Retractor belts




To put on a retractor seat belt, pull the latch plate across your body and clip it into the buckle. When the latch plate has locked safely into place you will hear a "click". After fastening, settle the belt by running your hand under the belt starting at the hip, go across to the buckle, then up under the sash. Any extra belt length will retract automatically.

The lap section should be worn as low as possible on your hips, not on your waist. Make sure the sash and lap sections of the seat belt are free from twists and are fitting firmly.

The emergency-locking retractor belt allows you to move freely while the vehicle is travelling normally. The belt will lock immediately on fast braking, impact with a solid object or any quick movement by the wearer.

To release the belt, press the slide button on the buckle and allow the belt to retract. Check that it fully retracts without twisting or turning.

## Front seat belt - shoulder height adjust (if fitted)

The seat belt is anchored to the vehicle near your shoulder. The position of anchorage can be moved to different heights.

Pull the knob out and move the seat belt anchor up or down. Release the knob at required position and ensure that the anchor has clicked into position.

Short people should select a low anchor position, tall people a higher one. This will ensure, for both safety and comfort, that the webbing of the seat belt fits on the shoulder.

For your safety, the driver's side shoulder anchor should not be adjusted while the vehicle is in motion.

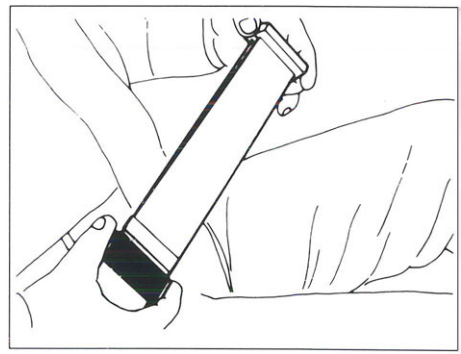
# SEAT BELTS

## Centre rear seat belt (if fitted)

The seat belt for the centre of the rear seat is non-retracting lap belt.

To fasten the seat belt, bring the latch plate across your body and clip it into the buckle. When the metal tongue has locked safely into place you will hear a "click". Make sure the belt is fitting firmly across the lower hip area and not across your waist. To release, press the slide button in the centre of the buckle.

To shorten or lengthen the seat belt: Tilt the latch plate at right angles to the seat belt webbing and pull the webbing through the belt adjuster as required.



Australian law requires that the driver and all passengers be properly restrained at all times with the seat belts provided in the car. Failure to do so could increase the chance of injury and/or the severity of injury in accidents.

### Australian Design Rules: WARNINGS

Seat belts are designed to bear upon the bony structure of the body, and should be worn low across the front of the pelvis or the pelvis, chest and shoulders, as applicable; wearing the lap section of the belt across the abdominal area must be avoided.

Seat belts should be adjusted as firmly as possible, consistent with comfort, to provide the protection for which they have been designed. A slack belt will greatly reduce the protection afforded to the wearer.

Care should be taken to avoid contamination of the webbing with polishes, oil and chemicals, and particularly battery acid. Cleaning may safely be carried out using mild soap and water. The belt should be replaced if webbing becomes frayed, contaminated or damaged.

It is essential to replace the entire assembly after is has been worn in a severe impact, even if damage to the assembly is not obvious. Belts should not be worn with straps twisted.

Each seat belt assembly must only be used by one occupant; it is dangerous to put a belt around a child being carried on the occupant's lap.

No modification or additions should be made by the user which will either prevent the seat belt adjusting devices from operating to remove slack, or prevent the seat belt assembly from being adjusted to remove slack.

The positioning of the tongue restrictor must never interfere with, or stop, the belt from fully retracting.

# SEAT BELTS

## Infant and child restraints

CHILDREN SHOULD BE RESTRAINED AT ALL TIMES WHEN RIDING IN A MOTOR VEHICLE.

In some States it is law that children must be belted in, whenever they are travelling in a vehicle in which seat belts are installed. CHILDREN ABLE TO SIT UP should be restrained with regular seat belts or an approved child restraint.

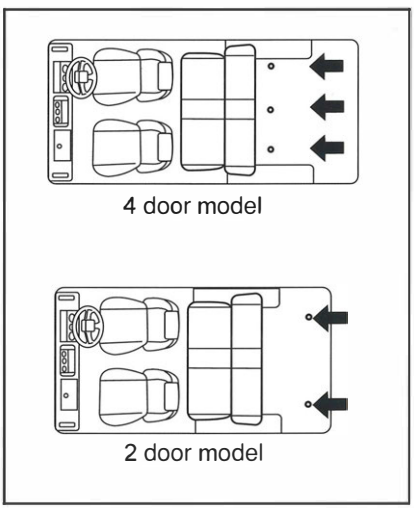
Where children are restrained with the regular seat belt and it is desired to raise their seating position this is to be done only by means of a support which is retained by the belt. NEVER USE A LOOSE CUSHION AS THIS COULD ALLOW SERIOUS INJURY IN THE CASE OF A VEHICLE COLLISION.

## Child restraint anchorages

Your vehicle is fitted with anchorage points for child restraints. Anchorage points are located in the floor behind rear seats.

A child anchorage fitting is installed in your new vehicle in one of the anchorage positions shown.

**WARNING:** Child restraint anchorages are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts, harnesses or for attaching other items or equipment to the vehicle.



4 door model

2 door model

Only approved child restraint harnesses should be used on anchorage points. See your Holden Dealer for advice about the various types of approved child restraints available.

INFANTS UNABLE TO SIT BY THEMSELVES should be carried in an approved child seat restraint.

## Passenger's side air bag and child restraints

**CAUTION:**

NEVER install a rear-facing child restraint in the front seat of vehicles fitted with a passenger's side air bag. The child could be seriously injured if the passenger's side air bag inflates, as the back of a rear-facing child restraint would be very close to the inflating air bag.

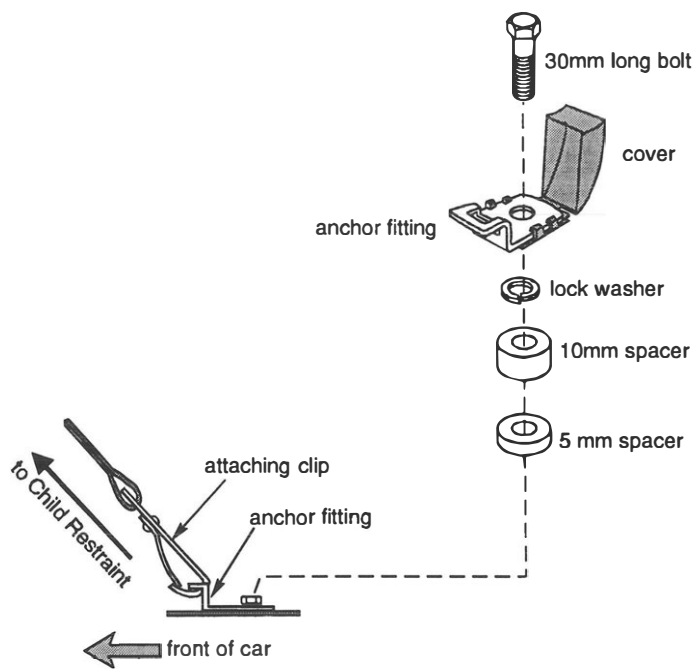
You may install a forward-facing child restraint in the front seat, but ALWAYS move the passenger seat as far back as it will go.

It is always better to install a child restraint in the rear seat.

# CHILD RESTRAINT ANCHORAGE

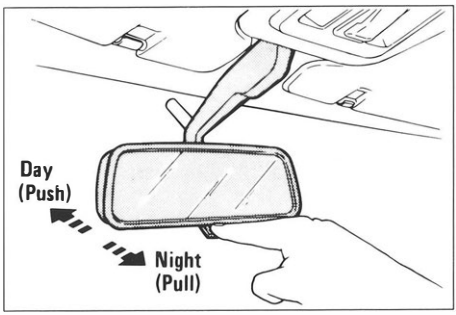
The illustration below shows how to install the anchor fittings for child restraints into the floor of this vehicle.
CAUTION: The anchor fitting is only applicable to child restraints approved to Australian Standard AS 1754-1991 (and subsequent amendments).
The anchor fitting is *not* applicable to older child restraints, *not* complying with Australian Standard AS 1754-1991, as the older child restraints may not attach securely to this type of anchor.

EXHAUST GAS WARNING - also refer Chapter 5
If the anchor bolt is removed from the floor the hole must be effectively sealed to prevent exhaust gases entering the vehicle interior. Either another suitable bolt or the plug originally fitted in the hole should be used.



# MIRRORS AND WINDOWS

## Inside rear view mirror

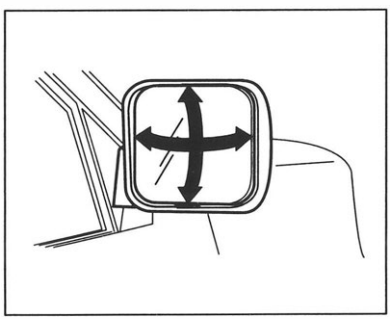



Move the mirror right/left or up/down to gain the required angle.

The anti-glare lever on the lower edge of the mirror enables a reflector to be used during night driving. This reduces glare at night from following vehicles.

During normal daylight operation, the lever should be set forward. To reduce glare at night, move the lever towards you.

## Manual outside rear-view mirror(s)

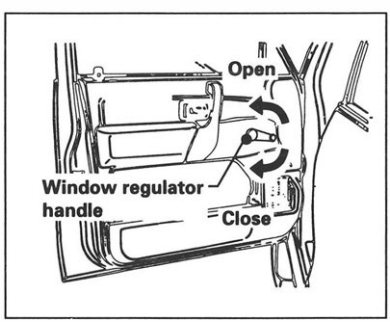


Adjust the outside rear-view mirror so you can just see the side of your vehicle in the side of the mirror. This helps you determine your relation to objects seen in the mirror. When selecting the most suitable angle ensure that the driver's head is in the normal position for driving, then adjust the mirror angle to suit.

Refer Chapter 1 for electric mirrors.

The left mirror may be convex shaped, to provide a wider view. Objects will appear further away than they actually are.

## Window handle (manual windows)

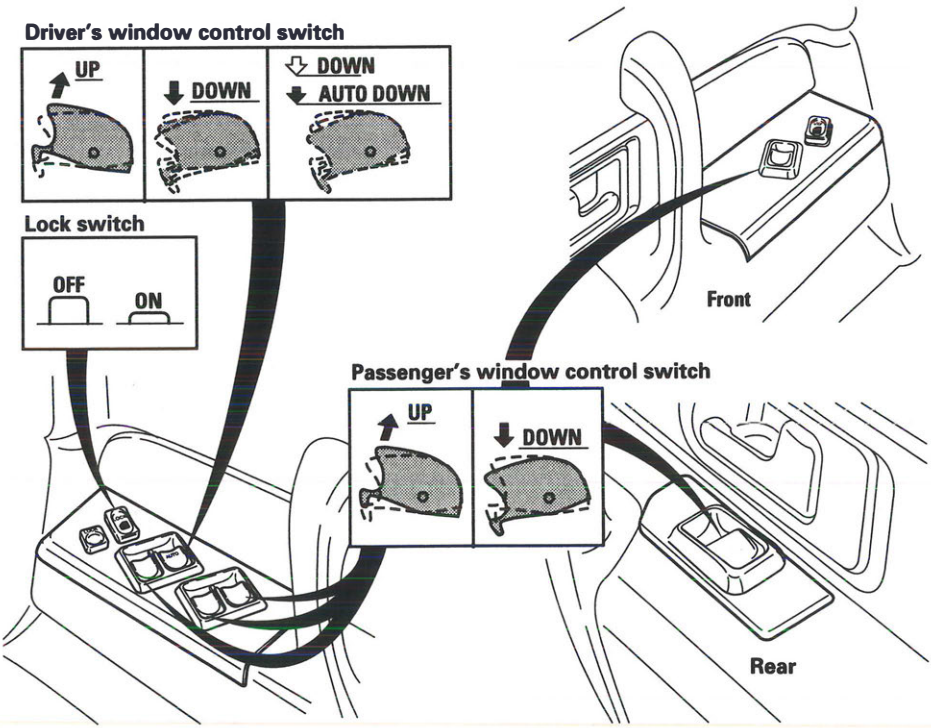



Turn the regulator handle to raise or lower the door windows. Refer next page for electric windows.

## 1/4 window (2 door model)

Pull catch forward and push window out until it locks. When closing, pull catch forward to release and then pull back into closed 'lock' position.

## ELECTRIC WINDOWS (if fitted)




The electric windows are operational when the ignition is turned to *ON*. If the switches do not work, check the circuit breaker, refer Chapter 6.

### Control switches

The main control switches are on the driver's door armrest, which contains a 'lock out' button plus one switch for each window.

Pull up the front section of each switch to close a window, or push down the front section of the switch to open the window.

In addition, the driver's window is fitted with 'auto down.' This means that if only slight pressure is used on the button the window will open until the button is released. If firm pressure is used, however, the window will completely open even after the finger is removed from the button.

The lock button, when de-pressed, will stop movement of all the passenger windows, either from the individual door switches or from the main control switches. Note that the lock button does not affect movement of the driver's window. Re-press the lock button to restore passenger window movement.

### Passenger door switches

Apart from the complete set of switches on the driver's armrest, individual switches are located on each passenger door.

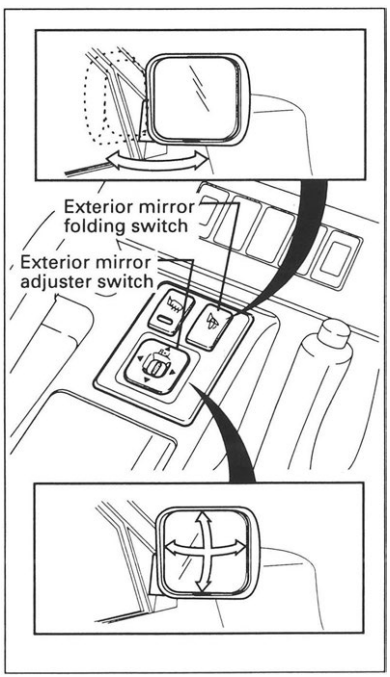
Pull up the front section of the switch to close a window, or push down the front section of the switch to open the window.

# ELECTRIC MIRRORS (if fitted)

The switches for the electric mirrors are located between the front seats. Note that whereas mirror angle and mirror foldback are operational when the ignition is turned to ON or ACCESSORIES, mirror heating is only operational when the ignition is turned to ON.
Moving the mirrors forcibly by hand will damage them.

## Mirror angle

The middle 'toggle' switch has two positions, left mirror or right mirror.
Push the edges of the square to move the mirror up, down, left or right.
It is not advisable to adjust the mirrors while driving.
The left mirror may be convex shaped, to provide a wider view. Objects will appear further away than they actually are.

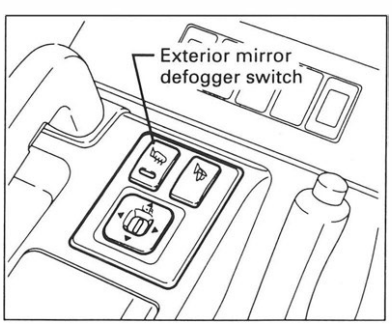



## Mirror foldback

To avoid mirror damage when driving in rough terrain with limited clearance, the mirror assembly can be folded flat against the side of the vehicle. Press the switch once to fold the mirrors back, press again to return them to their original position, as soon as conditions permit.

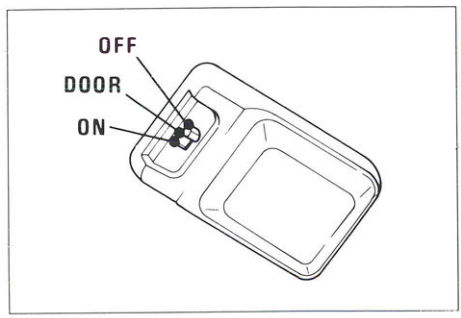
## Mirror heating

Useful for demisting the mirrors and for melting ice or snow, depress the switch to start heating the mirrors. The indicator light in the switch glows when the mirror heater is in use.
To avoid flattening the battery, turn the mirror heater off by re-pressing the switch when the mirrors are clear.
Refer Chapter 2 for operation of non-electric mirrors.



# INTERIOR LIGHTS

To prevent flattening the battery, it is advisable not to leave lights switched ON For convenience, it is advisable to keep the switch in the DOOR position, where applicable.




## Dome light (standard type)

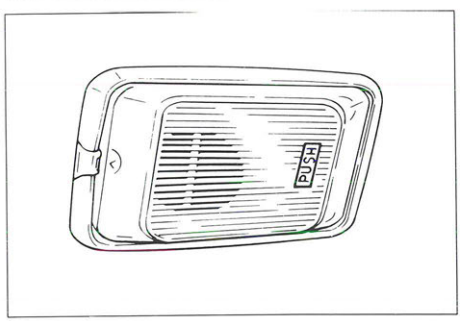
Located in the centre of the roof, the light switch has three positions.

**ON** Light turns on and remains on.

**DOOR** Light turns on when a door is opened and turns off when the door is closed.

**OFF** Light stays off.

*Note: When the light switch is set in the DOOR position, always ensure all doors are fully closed. Otherwise, an unclosed door will leave the light turned on, and so may flatten the battery.*



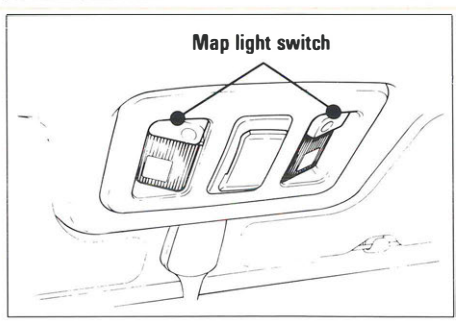

## Dome light (if time delay fitted )

Located in the centre of the roof, the dome light comes on when a door is opened.

It begins to dim approx. 3 seconds after closing the door.

The light will also come on when the lens of the dome light is pushed, and will go out when the lens is pushed again.

*Note: Always ensure all doors are fully closed, as an unclosed door will leave the light turned on, and so may flatten the battery.*




## Map lights (if fitted)

Fitted near the interior rear view mirror. 'Rock' the switch to the inside to turn the light on, to the outside to turn off.

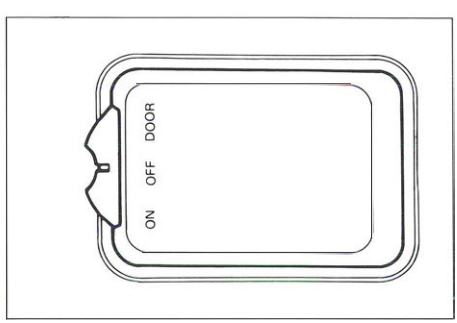
## Tailgate light

Located high on the inside of the tailgate, the light switch has three positions:

**ON** Light turns on and remains on.

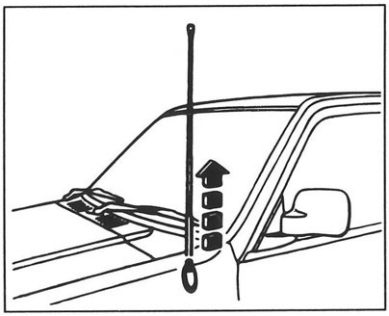
**DOOR** Light turns on when the tailgate is opened and turns off when the tailgate is closed.

**OFF** Light stays off.



# ANTENNA, FOOT REST, ASSIST GRIPS, ASH TRAY

## Antenna (electric)



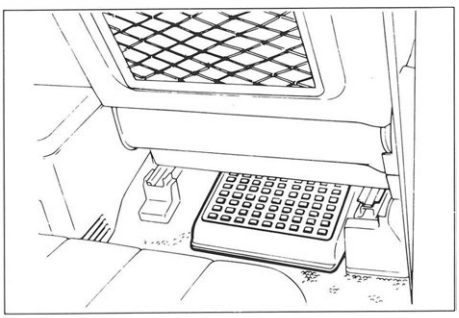
The antenna automatically extends to half normal height when the radio is turned on. For best radio reception in remote areas it may be necessary to extend the antenna fully using the antenna switch in the radio control panel.

The antenna automatically retracts when the radio is turned off.

It must be kept clean for good performance.

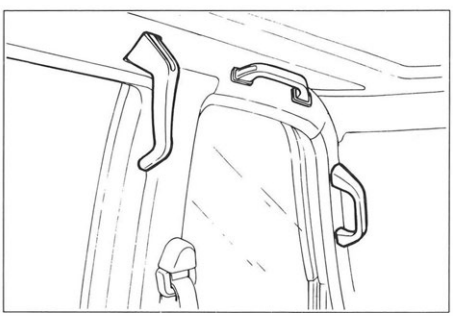
Refer to operating instruction supplement in the glovebox for all information about your radio and cassette.

## Footrest (if fitted)



On some models foot rests are provided under the front seats, for rear passenger use.

## Assist grips

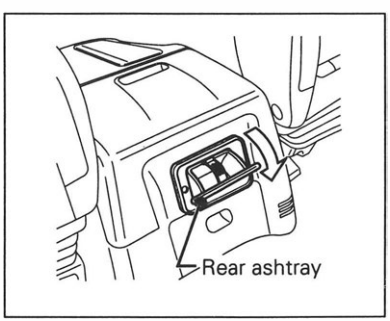


Assist grips are provided above passenger windows on all models and *in front* of windows on some models.

The assist grip above the rear window includes a coat hanger.

An additional assist grip is provided on the centre console for the front passenger's use.

## Rear ash trays




The rear ash trays is located at the rear of the console, between the back of the front seats.

Tilt to use.

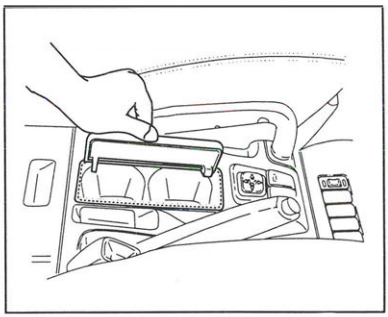
To empty, depress the top flap and pull the ash tray completely out.

Refer Chapter 1 for front ash tray.

# CUPS, CONSOLE, STORAGE, VISORS, CARD HOLDER

## Cup holder

Open the cup holder by lifting the lid. Close by lowering the lid. Be careful when using the cup holder as it will not prevent liquids from being spilled from the cup during abrupt stops or steering manoeuvres. Spilled liquids may soil or damage the interior of your vehicle.

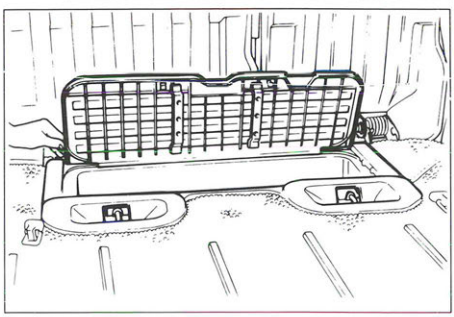


## Console

The centre console is located between the two front seats. Lift the lid to open.

On some models the lid can be opened in two stages.

To close, push the lid down.



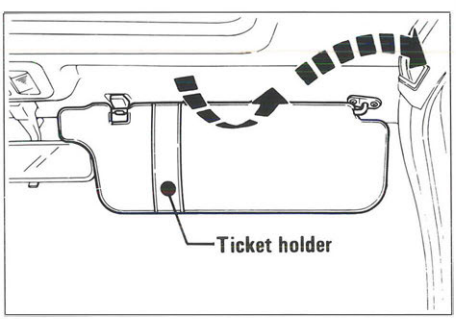
## Storage bin (if fitted)

The luggage storage bin is in the floor, under the rear seat, and can be accessed when the rear seat is folded up.

## Sunvisor

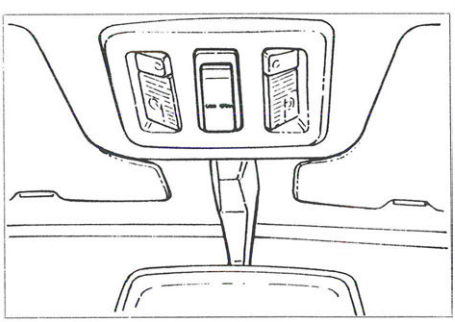
A ticket/document holder is fitted to the driver's side sun visor.

The sun visor can be pivoted to the side when unhooked.



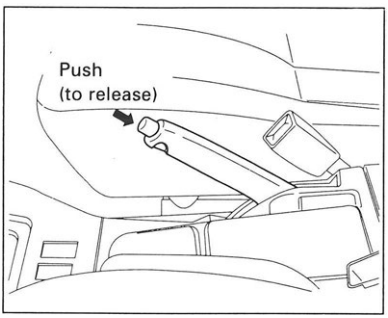

## Card holder clip (if fitted)

For your convenience, a card holder clip is provided in the roof, between the front reading lights.



# PARK BRAKE, ACCESSORY SOCKET

## Park brake




The park brake lever is between the front seats.

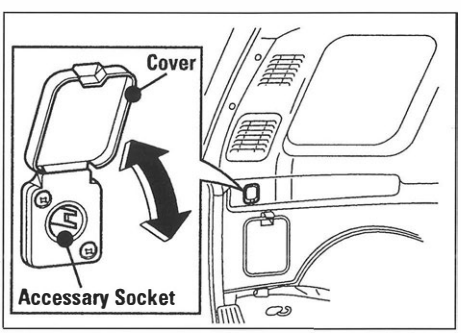
To apply, pull the lever up, without pressing the release button.

When the ignition switch it turned to ON, a symbol on the instrument panel will indicate that the park brake is not fully released.

To release, pull the lever slightly up, squeeze in the release button on the end of the lever and whilst depressed, lower the lever all the way down.

Never drive the vehicle with the park brake applied.

## Accessory socket




An accessory socket is provided in the rear of the vehicle. Lift the cover to access the socket.

Power is supplied to the socket when the ignition is in the "ACC" or "ON" position.

The socket supplies 12 volts of power and must not be used for more than 12 volts or 120 watts.

Do not use when the engine is stopped or the battery will discharge.

## Notes

CHAPTER 4

# Driving

Page


4-2 Safety
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4-4 Diesel engine starting
4-5 Manual transmission
4-6 Automatic transmission
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4-13 4WD with TOD
4-16 Differential
4-16 ABS (Anti-lock Brake System)
4-17 Running-in
4-17 Driving precautions

# SAFETY

## Before entering the vehicle

1. Check that windows, mirrors and lights are clean.
2. Visually check tyre inflation (check with a pressure gauge each week).
3. If you intend to reverse, check that the area behind your vehicle is clear.

## Before driving off

1. Be sure that all doors are closed and secured.
2. Position your seat for comfortable driving.
3. Adjust rear vision mirrors.
4. FASTEN SEAT BELTS.
5. Check that all the warning indicators light up when you turn the key to start the engine.

## Parking

1. Apply the park brake.
2. Switch off all exterior lights.
3. Place automatic transmissions in PARK. Place manual transmissions in REVERSE if pointing downhill or in 1st gear if pointing uphill.
4. Ensure that the 4WD lever is in 4H, High or 4L (not neutral).
5. Turn ignition key to LOCK and remove the key.
6. Shut all windows and lock all doors.

**CAUTION:**

Be careful where you park or drive. As with any vehicle, do not park or operate this vehicle in areas where combustible materials such as dry grass or leaves can come in contact with a hot exhaust system.

Never leave the engine running in a closed garage or underground car park.

# PETROL ENGINE STARTING

1. Apply the park brake firmly and release only after you have started the engine and ready to drive off.
2. MANUAL: Depress the clutch pedal fully and move the gear lever to Neutral. The clutch pedal can now be released.

   AUTOMATIC (if fitted): Move the shift lever to P(park) or N(neutral) position. The engine will not start if it is in any other position. As a safety precaution, you must have your foot on the brake pedal in order to shift the transmission lever out of the Park position.
3. Start the engine as outlined below.

For cold or hot starting the procedure is the same. Do not touch the accelerator pedal. Simply turn the key to the START position and release when the engine starts.

If the engine does not start in 10 seconds, wait 15 seconds to let the starter cool down. Then crank the engine at wide open throttle (accelerator pedal pushed completely down to the floor) for a maximum of 10 seconds. If the engine still does not start, release the key and pedal. Wait another 15 seconds and then repeat the entire procedure.

If the engine won't start and the check engine warning light on the instrument panel is flashing, turn the ignition key to OFF for at least 10 seconds before attempting to start the engine again.

If the engine still fails to start, contact your Holden Dealer.

**CAUTION:** When trying to start the engine, do not hold the key in the START position for extended time, for if unburnt fuel were to reach the catalytic converter and ignite, the converter could overheat or be destroyed by backfire.

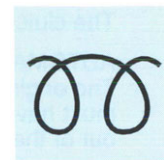
NOTE: You should not subject the engine to high load conditions such as full throttle acceleration or high speeds until it has completely warmed up.

# DIESEL ENGINE STARTING

## Glow plug indicator light

Your diesel engine has a special starting system. Small heating elements, called "glow plugs" warm part of the engine for improved starting.

Turning the starter key to the "ON" position starts the system and turns on the indicator light. This indicator light is located on the instrument panel.



When the glow plugs have heated the engine enough for it to start, the indicator light will go out - the engine is now ready to be started.

Note that waiting time depends on the engine temperature. The light may stay on for half a second if the engine is warm, or for about 5 seconds or longer if cold.

If the light fails to come on, see your Holden Dealer.

## Starting

1. Turn the starter key to the "ON" position and check to see that the glow plug indicator light has turned on. As soon as the glow indicator light has gone off,
2. MANUAL: Depress the clutch pedal fully and move the transmission gear lever to Neutral. The clutch can then be released.
   AUTOMATIC: Move the transmission lever to P (park) or N(neutral) position. The engine will not start if it is in any other position. As a safety precaution, you must have your foot on the brake pedal in order to shift the transmission lever out of the Park position.
3. Crank the engine by turning the starter key to the "START" position. Release the key when the engine has started. It will return to the "ON" position.

NOTE: Do not keep cranking the engine for more than 30 seconds if the engine fails to start. Wait for 30 seconds before trying again.

If the engine won't start and the check engine warning light on the instrument panel is flashing, turn the ignition key to OFF for at least 10 seconds before attempting to start the engine again.

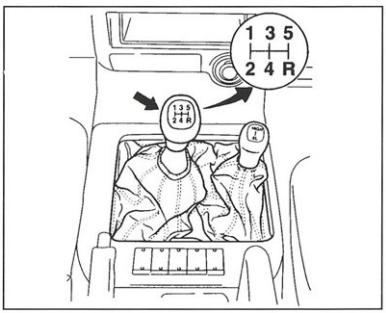
## Diesel turbo operating precaution

**ENGINE STARTING** Do not operate the engine above idle before normal engine oil pressure has been established (such as applying full throttle immediately upon initial start-up). This causes the turbocharger to operate at excessive speed before the bearings receive adequate lubrication.

Operation of the turbocharger for a period as short as 5 seconds without sufficient oil can cause bearing failure.

# MANUAL TRANSMISSION

This transmission has 5 fully synchronised forward gears. The shift pattern is shown on the end of the gear shift lever.




Never attempt to engage Reverse gear until the vehicle has completely stopped. A slight pause between depressing the clutch pedal and moving into "Reverse" gear is desirable to allow all the rotating components to stop and avoid gear crashing.

## Operating notes

- When shifting from one gear to another, be sure to depress the clutch pedal fully to avoid clashing and possible chipping the transmission gears.
- Shift the gear with a moderate effort to allow time for the transmission synchronizers to work properly.
- Whenever "Reverse" is selected with the ignition on, the back-up lights will operate.
- Do not drive with your foot resting on the clutch pedal as damage to the clutch may result.
- When stopped on an incline do not hold the vehicle by slipping the clutch. Use the park brake or brake pedal.
- When climbing steep grades, change down to a lower gear before the engine starts to labour. To maintain safe speeds on a steep downgrade and to reduce brake wear and overheating, shift into a lower gear before starting the decent.
- Do not over speed the engine when shifting down to the next lowest gear.
- 5th gear is recommended for maintaining highway cruising speeds and is not recommended for heavy city traffic.
- Use caution when speeding up or when shifting into a lower gear on gravel or in snow. Sudden acceleration or engine braking action (due to shifting to a lower gear) could cause the drive wheels to skid. This could lead to loss of vehicle control.

## Recommended up-shift speeds

The following shift speeds provide the best vehicle performance and fuel economy. For cruising, choose the highest gear for that speed (cruising speed is definied as a relatively constant driving speed). Sometimes skipping one or more gears from acceleration to cruise is possible. For example, when accelerating to 40 km/h cruise, a 2nd gear to 4th gear shift would be appropriate at 40km/h.

| | |
|---|---|
| 1st - 2nd | 25 km/h |
| 2nd-3rd | 40 km/h |
| 3rd-4th | 55 km/h |
| 4th-5th | 70 km/h |

Note: If the engine is "lugging" (which occurs when the speed you are travelling at is too slow for the gear the transmission is in), the transmission should be downshifted to the next lower gear. You may need to down-shift two or more gear positions to keep the engine from "lugging" or to keep the performance at a satisfactory level.

# AUTOMATIC TRANSMISSION

Depress the square release button on the right side to the T-bar handle when shifting to any position indicated by the white arrow.

You may shift without depressing the release button into any position indicated by the black arrow.

NOTE: The engine will not start unless the selector is in P(park) or N(neutral).

To prevent the vehicle "creeping" you should always have your foot on the brake pedal when shifting out of park.

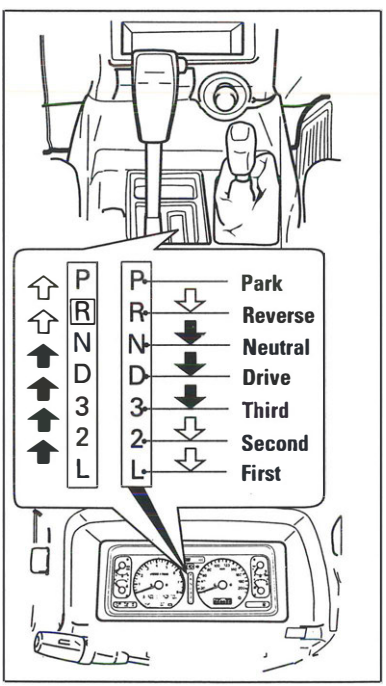
## Instrument panel

The T-bar position is also shown with an indicator light in the centre of the instrument panel.

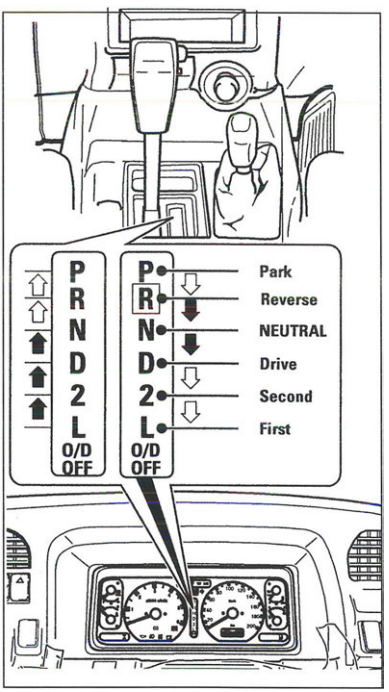
**R**everse is indicated with an orange light, designed to remind you to ensure that the vehicle is brought to a complete stop before moving the T-bar to a forward gear position.

**Petrol engine: P**ark, **N**eutral, **D**rive, **3**, **2**, and **L** are indicated with a green light.
**Diesel engine: P**ark, **N**eutral, **D**rive, **2**, and **L** are indicated with a green light.

*Petrol engine*

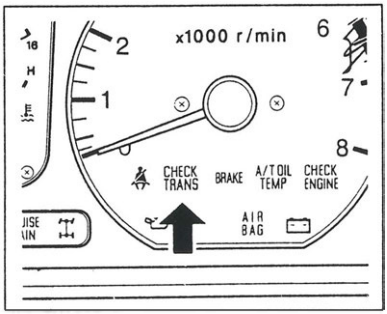



*Diesel engine*



# AUTOMATIC TRANSMISSION cont.

## Check trans light



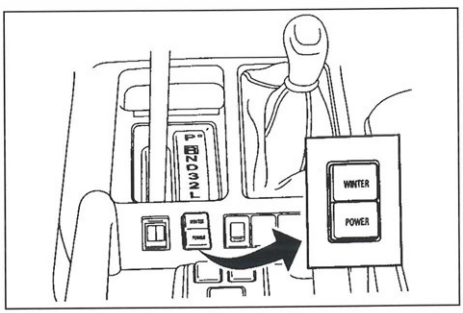

To see if the bulb is working, the CHECK TRANS light on the dash is displayed when the key is turned to ON.

If the light flashes it means that the computer controlling the transmission has found a problem. The vehicle can still be driven when the light is flashing but should be checked by your Holden Dealer as soon as possible.

Depending on the nature of the problem, the transmission may still be able to change gears without your assistance. However, in some cases the transmission's computer may put the transmission into `safety mode'. In safety mode the transmission may not shift automatically and you must then shift the T-Bar lever to change gears at the following recommended speeds.

- High speed driving (over 80 km/h): select "3" (petrol engine only) or "D" (petrol and diesel engines).
- Moderate speed driving (under 80 km/h but over 25 km/h): select "2".
- Starting from a stop, driving up or down a steep hill, or for engine braking when towing a trailer downhill: select "L".

## Power/Winter/Normal drive




The two buttons marked POWER and WINTER control the three shift patterns available with your automatic transmission: POWER, WINTER and NORMAL. When the POWER button is pressed in, the power light is illuminated and the transmission is operating in the power drive mode, likewise for WINTER. When neither button is pressed in (and no light is illuminated) the NORMAL pattern is selected.

NORMAL drive is the most effective pattern for normal or freeway driving and allows for maximum fuel efficiency.

The POWER drive is recommended when overtaking and gives acceleration, especially in hilly areas or when towing.

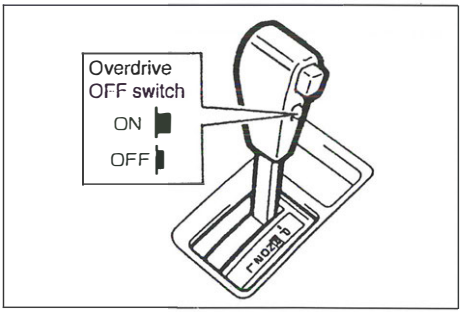
WINTER drive is only recommended on slippery roads, as operation in WINTER drive during normal driving conditions will cause decreased performance and sluggish acceleration.

The winter mode may be activated when the T-Bar lever is in D and vehicle speed is less than 11 km/h and will be automatically deactivated when vehicle speed reaches approx. 34 km/h. It can also be deactivated by moving the T-bar lever to any position other than D, by pushing the WINTER button or turning off the ignition. WINTER drive is recommended when slowly starting off in slippery conditions; the vehicle will start off in 3rd gear.

# *AUTOMATIC TRANSMISSION cont.*

## Diesel engine: overdrive switch

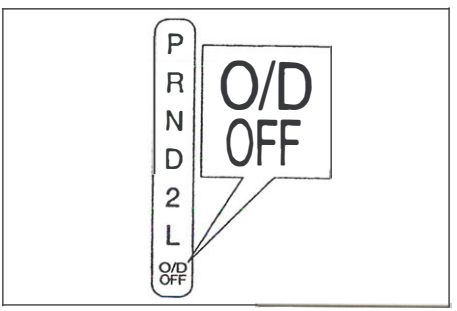
The automatic transmission with the diesel engine is a 3-speed automatic transmission with a high ratio 4-speed gear (overdrive), which can be turned off and on with the switch on the right side of the transmission T-bar, as shown in the illustration.




### Turning overdrive OFF

When the switch is pressed in, overdrive is OFF and the "O/D OFF" light will show at the bottom of the transmission T-bar selector position, as shown in the illustration.

The transmission will act as a 3-speed transmission. This can be useful when engine breaking is required, for example, when driving down long slopes, or when driving in hilly areas.




### Turning overdrive ON

Press the button again so that the button is in the out position. The "O/D OFF" light will go out and the transmission will act as a 4-speed, which is more fuel efficient, quieter and smoother.

Overdrive should be turned on for most normal driving conditions.

## AUTOMATIC TRANSMISSION cont.

| | |
|---|---|
| P (park) | This stops the rear wheels from turning and should be selected (together with the park brake) when leaving the vehicle. Never select P until your vehicle is fully stopped. The P position is one of only 2 positions (the other is N) in which your engine may be started. |
| R (reverse) | Never select R until your vehicle is fully stopped. Reversing light will operate when R is selected and the ignition is on. After reversing, make sure the vehicle has fully stopped before proceeding forward again. |
| N (neutral) | This is the out-of-gear position. You may then restart a stalled engine while the vehicle is still moving or stopped. |
| D (drive) | **Petrol engine**: This is the normal forward driving position and allows the transmission to choose the appropriate gear (1st through to 4th) for the driving conditions and optimum fuel economy.<br>**Diesel engine:** This is the normal driving position and allows the transmission to choose the appropriate gear for the driving conditions. When overdrive is switched on, 1st through to 4th will be used; when overdrive is switched off, 1st through to 3rd will be used. |
| 3 (third) | This position allows the transmission to shift between 1st, 2nd and 3rd gear as conditions require. 4th gear is excluded. Use this position when going down a long hill or on a road with many sharp curves. Shift back into the "D" position to return to normal driving. |
| 2 (second) | This position allows the transmission to shift between 1st and 2nd gear. Use this position when going down a moderate gradient where you want to slow down a little without using the brake. Shift back into the "D" position to return to normal driving. |
| L (low) | The transmission cannot shift out of 1st gear when in this position and should only be used when strong braking effect is needed on a very steep hill. The T-bar lever can be shifted back to "L" at any speed. However, the transmission will not actually enter 1st gear until vehicle speed is below 60 km/h. Remember to shift back to "D" to resume normal driving. |

# AUTOMATIC TRANSMISSION cont.

## Automatic transmission notes:

- Do not shift the T-bar while the accelerator pedal is depressed, as it could cause you to lose control of the vehicle.

  Do not go from P or N to R or D with the accelerator pedal depressed.

- When driving down a long hill, reduce your speed and select a lower range. The engine will provide a braking effect. Remember if you ride the brakes, they may overheat, resulting in reduced performance. This is particularly important when towing.

- Be careful when accelerating, upshifting, downshifting or braking on a slippery surface. The abrupt change in engine speed, such as sudden acceleration or engine braking, could cause the drive wheels to spin or skid.

- Don't press the accelerator pedal with the brakes on in either L, 2, 3, D, or R. This will overheat the transmission.

- Don't use the accelerator pedal to hold the car on a slope. Use the brakes.

- Don't ever coast the vehicle in N - this lessens your control and the engine braking power.

  Always slow down in gusty crosswinds.

- Refer Chapter 6 for checking automatic transmission fluid level.

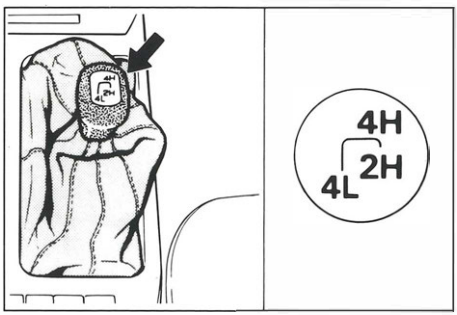
- Diesel models: Uphill/downhill shift control system:

  This system operates only when the selector lever is in the D position.
  When climbing, the system prevents unnecessary gear changes, providing smoother vehicle operation. When the system senses that the vehicle is climbing, it automatically downshifts to 3rd gear, preventing frequent upshifts to 4th gear.
  When descending, the system holds the vehicle in 3rd gear to take advantage of engine braking and reduce brake pad/lining wear. The system automatically downshifts from 4th to 3rd gear when the level sensor reaches a preset value.

# 4 WHEEL DRIVE (without TOD)

## Transfer lever

When the transfer lever is in 4H or 4L the indicator light on the instrument panel will glow.




2H: Two wheel drive, high range. Use this for normal driving on sealed roads. This position gives greater economy, quieter ride and least vehicle stress.

4H: Four wheel drive, high range. Use this for icy or snow covered roads and loose surface such as gravel. This position provides greater traction than 2WD. Top speed is limited to 80 km/h.

4L: Four wheel drive, low range. Use this for maximum power and traction. Use 4L for climbing or descending steep hills, off-road driving and hard pulling in sand, mud or deep snow.

Do not use 4WD for normal driving on sealed roads. It will cause unnecessary noise, poor fuel consumption and stress 4WD components.

When shifting the transfer lever be sure to shift quickly and securely. Do not stop shift lever movement midway. Some noise is normal during shifting of the transfer control lever.

When the transfer lever is not securely in gear (2H, 4H or 4L) driving force cannot be transmitted to the wheels. Driving with the transfer lever not securely in gear may cause damage to the transfer gear box.

If your vehicle is fitted with an automatic transmission, be careful not to exceed the maximum speed shown in each range when accelerating.

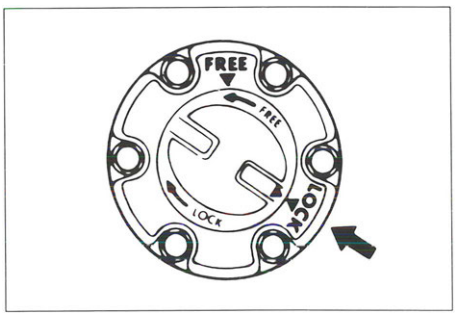
| Transfer control lever | L | 2 | 3 |
|---|---|---|---|
| 2H | 56 km/h | 93 km/h | - |
| 4H | 56 km/h | 80km/h | 80 km/h |
| 4L | 24 km/h | 40 km/h | 40 km/h |

# MANUAL LOCKING HUBS (without TOD)

4 wheel drive / 2 wheel drive selection is made by both transfer lever position (from inside the vehicle) and front (left and right) wheel hub position. That means that the vehicle will not operate in the 4 wheel range until the wheel hubs have been locked - even if the transfer lever is in the 4L or 4H position.

**To move from 2H to 4H**

1. Move the lever to 4H. If front hubs are already locked, 4WD can be selected while driving. If front hubs are unlocked then you must never shift the transfer lever while the vehicle is in motion, or you may damage the vehicle.
2. Set both left and right front wheel hubs to the "LOCK" position.




**To move between 4H and 4L**

AUTOMATIC TRANSMISSION: If your vehicle has an automatic transmission, stop the vehicle and move the transmission T-Bar lever to "N", before moving the 4WD transfer lever to 4L.

MANUAL TRANSMISSION: If your vehicle is fitted with a manual transmission then you must STOP the vehicle, fully depress the clutch pedal and move the lever from 4H to 4L or 4L to 4H.

**To select 2WD**

1. Shift the transfer lever to 2H.
2. Set both left and right front wheel hubs to the "FREE" position.

2H can be selected at any speed by the transfer lever. The indicator light on the dash will go out because the vehicle will be driving in 2WD but until the hubs have been unlocked poor fuel economy will result.

## MANUAL LOCKING HUB CAUTIONS:

- Never drive the vehicle with the front wheel hubs in the "FREE" position and the transfer lever in 4H or 4L above 5 km/h or 100 metres.
- Never LOCK one hub only - both sides must be either in the "LOCK" or "FREE" position.
- Vehicles should never be operated on hard surfaces or sealed roads for a distance above 1 kilometre in 4L or 4H with the hubs in the "LOCK" position.
- Vehicles should never be manouvered through tight turns on hard surfaces when in 4L or 4H with the hubs in the "LOCK" position. This will avoid damage to the drivetrain and/or driveline windup.
- To properly run-in front wheel drive axle components, drive the vehicle for the initial 300 km with the wheel hubs in the "LOCK" position.
- To lubricate the front wheel drive axle, the vehicle should be driven for at least 20 km every month in 2WD with the wheel hubs in the "LOCK" position.
- Never move the transfer control lever from High to Low range (4H to 4L) or from Low range to High range (4L to 4H) while the vehicle is moving.

# 4 WHEEL DRIVE (with TOD)

## TOD (Torque On Demand)

The TOD system automatically distributes driving force to the front axle as required.

TOD is active when the AUTO switch is pushed in and the transfer lever is in the 'HIGH' position.

If the transfer lever is set to '4L' position then the drive to the front axle is permanently engaged, rather than changing the driving force as required.

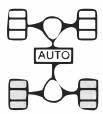
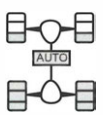
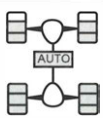
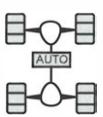
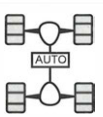
If the transfer lever is set to HIGH but the 4WD AUTO switch is out then the front axle is permanently dis-engaged, with all driving force going to the rear axle.

## TOD indicator

To check that the bulb is working, the TOD indicator will show for a few seconds when the ignition is switched ON. If the light flickers it indicates a fault in the TOD system. Stop the vehicle and re-start the engine.

The light will flash when 4WD is being connected and disconnected.

The green coloured front wheels of the indicator show how the driving force is distributed.

| | | |
|---|---|---|
| 2WD |  | All driving force to the rear wheels. |
| TOD | | Front wheel: 0 to 15%<br>Rear wheel: 100 to 85% |
| |  | Front wheel: 15 to 30%<br>Rear wheel: 85 to 70% |
| |  | Front wheel: 30 to 50%<br>Rear wheel: 70 to 50% |
| |  | Front wheel: 50%<br>Rear wheel: 50% |
| 4L |  | Permanent 4WD. |

**2WD** (high range, 2 wheel drive)

Use this for normal driving on sealed roads. This position gives greater economy, quieter ride and least drive train wear.

**TOD** (high range, 4 wheel drive)

Use this for normal driving on wet, icy or snow covered roads. This position provides greater traction 4 wheel drive.

**4L** (low range, 4 wheel drive)

Use this position for maximum power and traction. Use "4L" for climbing or descending steep hills, off-road driving and hard pulling in sand, mud or deep snow.

Do not use 4L for normal driving on sealed roads, as it will cause unnecessary noise and wear, and give poor fuel economy.

## *4 WHEEL DRIVE (with TOD) cont.*

### Shifting positions

**2WD < > TOD**

The 4WD AUTO switch can be pushed from 2WD to TOD and TOD to 2WD while driving. When pressing the switch, keep the steering wheel straight ahead and drive at a constant speed, below 96 km/h.

**Never push the 4WD AUTO switch from 2WD to TOD while the rear wheels are spinning, such as on a snow-covered or icy road.**

**4WD (low)**

To select 4WD the transfer lever must be moved to 4L, the position of the 4WD AUTO switch is irrelevant. Before moving the lever, you must stop the vehicle. Place the transmission T-bar in N(neutral) position and set the park brake. Then, move the transfer lever from HIGH to 4L, or 4L to HIGH, before driving off.

**Never move the transfer lever from HIGH to 4L or from 4L to HIGH while the vehicle is moving.**

**WARNING:**

- **When moving the transfer control lever, be sure to shift it quickly and securely. Note that the TOD indicator light will flash when the transfer lever is moved.**
- **Do not shift the lever sideways.**
- **Some noise is normal when shifting the transfer lever.**
- **If the transfer lever is not securely in position (HIGH or 4L position) driving force cannot be transmitted to the wheels (the TOD indicator will turn off with this condition). Driving with the transfer control lever not securely in gear may damage the transfer gear box.**

Note: When turning the steering wheel fully to the right or the left after shifting from 4L to HIGH, the vehicle may experience "tight corner braking". This phenomenon is peculiar to 4 wheel drive vehicles. It results from a speed difference between the front and rear wheels. If this phenomenon occurs, return the steering wheel to the straight ahead position and allow the vehicle to move forward several meters.

# FOUR-WHEEL DRIVE- SHIFT ON THE FLY

The 4WD indicator light illuminates when the 4WD switch is depressed. Wait until the 4WD light on the dash stops flashing before moving the lever, otherwise loss of control may be experienced.

Additional information is provided on the cover of the vanity mirror under the driver's side sunvisor.

## 2WD (High Range, 2-Wheel Drive)

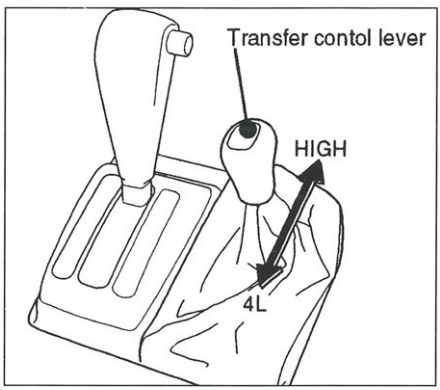
Use this for normal driving on dry surfaces. This position gives greater economy, a quieter ride and the least drive train wear.

## HIGH (High Range, 4-Wheel Drive)

Use this for normal driving on wet, icy or snow-covered roads. This position provides greater traction than two-wheel drive.

## 4L (Low Range, 4-Wheel Drive)

Use this for maximum power and traction. Use 4L for climbing or descending steep hills, off-road driving and hard pulling in sand, mud or deep snow.




## Shift on the Fly System

The 'shift on the fly' system is a device used to connect the front wheels to, and disconnect them from the driving axle. These operations are automatically changed when the 4WD switch is pushed while the vehicle runs straight.

**CAUTION:** Do not use 4-wheel drive for normal driving on dry surfaces. It will cause unnecessary noise and wear, and poor fuel economy.

## Operation of 4WD Switch

2WD - HIGH: The 4WD switch can be pushed from 2WD to HIGH and vice versa while the vehicle is running straight at a constant vehicle speed under 96 km/h.

## Shifting of the Transfer Control Lever

HIGH - 4L: For this operation do the following with the 4WD switch pushed in:

- Stop the vehicle.
- Depress the clutch fully (manual transmission) or place in neutral (auto trans).
- Move the transfer control lever from HIGH to 4L or 4L to HIGH.

**CAUTION:** When moving the transfer control lever, be sure to shift it quickly and securely. Do not stop lever movement midway. Some noise is normal when shifting the lever between HIGH and 4L. When the transfer control lever is not securely in gear,, the engine and transmission are disconnected from the driveline. Therefore, the driving force cannot be properly transmitted. The vehicle could roll when parked, even when the automatic transmission is in the Park position. Driving the vehicle when the transfer control lever is not securely in gear may damage the transfer gearbox.

## *FOUR-WHEEL DRIVE cont.*

**CAUTION:** Never push the 4WD switch in while the rear wheels are spinning.

Never move the transfer control lever from HIGH to 4L or from 4L to HIGH while the vehicle is moving.

Shifting from HIGH to 4L is still mechanically accomplished by the range shift lever. which cannot be moved to the low ratio position unless the dash-mounted 4WD switch is depressed.

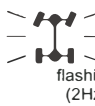
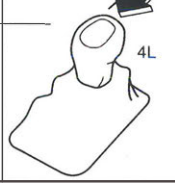
If the 4-wheel drive indicator light on the instrument panel continues to flash slowly when the 4WD switch is pressed, drive straight ahead while accelerating or decelerating (if this occurs when driving the vehicle), or move the vehicle straight 2 to 3 meters (if this occurs when the vehicle is stopped). Then the 4-wheel drive indicator light will operate correctly.

In cold weather or under high speed operating conditions, the 4-wheel drive indicator light may change from flashing slowly (2Hz) and begin flashing fast (4Hz) when the 4WD switch is changed from the 2WD to the 4WD position. If this occurs, slowdown or stop the vehicle and reset the 4WD switch.

If the 4-wheel drive indicator light changes from flashing slowly (2Hz) and begins to flash fast (4Hz) when the 4WD switch is changed from the 4WD to the 2WD position (OFF), shift the transfer control lever to HIGH and reset the 4WD switch.

If the 4-wheel drive indicator light fails to either go off or come on, see your Holden Dealer and have the vehicle inspected.

USING THE 4WD SWITCH AND TRANSFER CONTROL LEVER

| VEHICLE CONDITION | 4WD SW | TRANSFER CONTROL LEVER | LIGHTING OF INDICATOR | NOTES |
|---|---|---|---|---|
| 2WD HIGH | | | | When the 4WD switch is set at 2WD, the TRANSFER LEVER can not be moved to 4L position. (Mechanical Lock) |
| 4WD HIGH | | |  | Shift on the Fly system is operating. |
| | | | | |
| 4WD LOW | |  | | When the transfer lever is set at 4L, the drive mode can not be changed by pressing the 4WD switch. If the switch is pressed, the indicator light, instead of flashing slowly (2Hz), will begin flashing fast (4Hz). |

# DIFFERENTIAL & ANTI-LOCK BRAKE SYSTEM (ABS)

## Differential

The differential provides drive to the rear wheels. When the vehicle is moving straight ahead equal drive is provided to both wheels. When cornering, the wheels spin at different speeds.

Your Jackaroo uses a variation of Limited Slip Differential (LSD) known as "torque applied". A characteristic of this type of differential is that if traction is lost at one wheel, the LSD will transfer all drive to that wheel.

Once traction has been regained at the wheel in question, the LSD transfers drive to both wheels.

## ABS

The ABS (Anti-lock Brake System) is in addition to your vehicle's normal brake system. It prevents the wheels from locking up when braking, irrespective of the road conditions and tyre grip. It starts to regulate the braking as soon as a wheel shows a tendency to lock. The car remains steerable, even in the event of panic braking, for instance on bends or when swerving to avoid an obstacle.

Maximum braking is provided for each wheel, up to the point where it would lock. This means that steering control is retained.

In an emergency braking situation the driver should keep full force on the brake pedal, without 'pumping' the brake pedal. 'Pumping' the brake pedal can reduce brake efficiency when ABS is controlling the braking.

DO NOT let this special safety feature tempt you into taking risks when driving. Traffic safety can only be achieved by adopting a responsible driving style. Your speed should always be adjusted to suit road and traffic conditions.

An ABS warning light is provided with the gauges. To check that the bulb is working, the light will come on when the ignition is first turned on and goes out after the engine has started. If this symbol is displayed when driving a malfunction of the ABS system is indicated. Remember, however, that this only means that the system's 'no lock' assistance is not operating, your vehicle's conventional brake system will still operate normally.

ABS

When your vehicle is in a critical braking condition the ABS system will make itself noticeable through pulsing of the brake pedal and the noise of the regulation process, thereby reminding you to match your speed to the road conditions, even though it is keeping control of the braking.

When the ignition is turned on (and car speed is greater than 6 km/h) the ABS system performs a self check. This may be heard as well as felt, as pulsing, through the brake pedal.

If the brake is put on while turning or driving over split-level road surfaces, ABS will often be actuated. This is normal because the inside wheels or the wheels running over split-level have less driving force and are easier to lock.

# DRIVING PRECAUTIONS

## Running-in

These days, there's no need to follow the formal running-in schedule. However, by observing a few simple precautions during the first few hundred kilometres of driving you will greatly assist your vehicle's future performance and economy.

For the first 800 kilometres, don't exceed 90 km/h and avoid driving at any one speed - either slow or fast - for any length of time. Therefore, avoid using the cruise control (if fitted) while "running-in".

Always drive at moderate speed until the engine has completely warmed up.

For the first 800 kilometres heavy braking should be avoided, except in an emergency, since brake misuse during this period could impair future braking efficiency.

It is best to drive your new vehicle for 1,500 kilometres before towing a load. If you must tow before this do not exceed 80 km/h on good roads. No heavy off road towing should be attempted before 1,500 km.

## Vehicle design

Jackaroo models have higher ground clearance and a narrower track to make them capable of performing in a wide variety of off-road applications. Specific design characteristics give them a higher centre of gravity than ordinary vehicles. An advantage of the higher ground clearance is a better view of the road allowing you to anticipate problems. They are not designed for cornering at the same speeds as conventional 2 wheel drive vehicles any more than low-slung sports cars are designed to perform satisfactorily under off-road conditions. If at all possible, avoid sharp turns or abrupt manoeuvres. As with other vehicles of this type, failure to operate this vehicle correctly may result in loss of control or vehicle roll over. Always use your seat belt.

## Brakes

- The power assisted brakes which are fitted to your vehicle utilise vacuum from the engine when it is running. Never let the vehicle run down steep grades without the engine running. Never coast with the engine switched off.
- If the power assist is lost because of a stalled engine they are designed to have enough reserve vacuum for you to bring the vehicle to a full stop by applying the brake pedal once - do not pump the brake pedal to stop the vehicle.
- A decrease in driving, cornering and braking traction occurs when water, snow, ice, gravel or other materials are on the road surface. Driving practices and vehicle speed should be adjusted to the road conditions.
- Driving through water may affect performance. Applying the brakes lightly will indicate whether they have been affected. To dry them quickly, lightly apply the brakes while maintaining a slow forward speed with an assured clear distance ahead until brake performance returns to normal.
- Brake pedal travel should not be obstructed by ill-fitting floor mats or any other material under the pedal which causes interference with normal pedal movement.
- Your seat should be positioned so that you can push the brake pedal satisfactorily under all braking conditions.

# DRIVING PRECAUTIONS cont.

## Steering

- Power assisted steering, which is fitted to your vehicle, has been designed to reduce steering effort. It uses hydraulic pressure to lighten steering loads and is designed so that "road feel" is retained. Care should be taken not to hold a turning force on the steering wheel when stationary (i.e. when waiting before turning a corner, etc.) as this creates unnecessary high operating pressures within the system.

- If the power steering is rendered ineffective because the engine has stalled, the drive belt broken or if the pump reservoir is empty of fluid, the car can still be steered. However, due to the much greater effort required to steer, it is recommended that you have the problem fixed promptly.

## Loose articles

Whenever possible, loose articles should be firmly secured, as they can become flying projectiles in accidents. Storage areas include the glovebox, the console, seat back storage pockets, tie down straps in the luggage area, and (on some models) storage bins under the rear seat.

## Modifications to your vehicle

Any modification (including fitting non approved accessories) to your vehicle could affect its performance, safety, or durability and possibly invalidate the warranty. In particular:

- Incorrectly mounted bull bars may affect vehicle handling and cause damage to the frame of the vehicle.
- Insulation-piercing quick fit type wiring connectors may damage wiring and electronic components.
- Under no circumstances should the engine or transmission computer systems be altered or added to.

Not only will the fitting of unapproved items be likely to damage your vehicle, but many are illegal, for instance tow bars and bull bars are covered by legal requirements. You should contact your Holden Dealer for assistance, if required.

## Warning

The fitting of a non-Holden bug deflector on the front edge of the bonnet is not recommended. A non-Holden bug deflector may cause the engine to overheat by deflecting air from the engine air intake, located to the rear of the bonnet.

# *DRIVING PRECAUTIONS cont.*

## Parking - automatic transmission

If the vehicle is parked on a hill, always apply the park brake before placing the transmission in Park. Otherwise the weight of the vehicle may put so much force on the transmission that it may be difficult to pull the lever out of Park.

Therefore, when parking, always apply the park brake before moving the lever to Park. When preparing to move off, put your foot on the brake pedal, shift the lever out of Park and then release the park brake.

## Water crossing

Whenever driving across a shallow river or deep puddle, extreme care must be exercised or water may enter the engine air intake causing serious engine damage.

To prevent water being forced through the grille into the engine compartment, tie a sheet of canvas or some other suitable material to the underside of the front bumper bar and wrap it over the bumper, grille and top of the bonnet with a tie back to the door mirrors.

Remember that steady speed and constant traction are necessary for successful water crossing.

When the crossing is completed, remove the canvas.

After deep water crossing, check to ensure that no water has entered and mixed with the oil of the following components: engine, transmission, transfer, front and rear differential, refer Chapter 7.

## Disc brake wear indicators

Front and rear disc brakes have built-in wear indicators which should make a high-pitched squealing or cricket-like warning when the brake pads are so worn that new pads are needed. The sound will come and go, or be heard all the time when the vehicle is moving and may stop when the brake pedal is pressed down firmly. Expensive disc damage can result if pads are not replaced when needed.

CHAPTER 5

# Fuel

Page


5-2 Carbon monoxide caution
5-3 Petrol filling
5-3 Diesel filling
5-3 Fuel Tank capacities
5-4 Emission Control
5-5 Reducing fuel consumption

# PETROL

## EXHAUST WARNING - CARBON MONOXIDE POISONING

Exhaust gases can produce carbon monoxide, a dangerous gas, which can cause unconsciousness and even death to both humans and animals.

You could inhale the gases if the exhaust system on your vehicle is faulty.

To protect against exhaust gases entering the vehicle, the exhaust system and body should be inspected:

- each time the vehicle is serviced

- whenever a change is noticed in the sound of the exhaust system

- whenever the exhaust system, underbody or rear of the vehicle is damaged.

Take the vehicle to your Holden Dealer if you think your vehicle needs inspecting for any of the above reasons.

DO NOT SIT (OR LEAVE CHILDREN OR PETS) IN A PARKED VEHICLE FOR ANY EXTENDED PERIOD OF TIME WITH THE ENGINE RUNNING. DO NOT RUN THE ENGINE IN AN ENCLOSED AREA (SUCH AS THE GARAGE) ANY LONGER THAN IS NEEDED TO MOVE THE VEHICLE.

Driving with the tailgate open is not recommended. If you *must* travel with the tailgate open, close all windows, ensure that the heater controls are set to outside (rather than re-circulate) with air directed to the face and the fan on the highest speed. Do not exceed 50 km/h unless necessary.

## PETROL CAUTION:

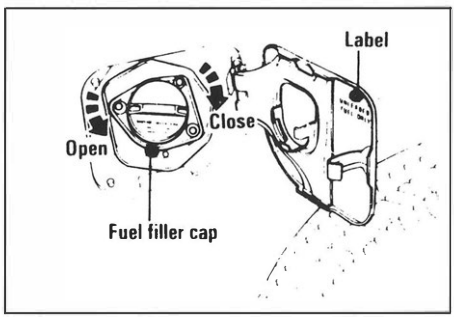
- Petrol is extremely flammable and highly explosive.
- Always turn off the engine and any mobile phones when refuelling.
- Do not smoke or allow open flames or sparks near the vehicle when refuelling.
- If petrol fumes are smelt while driving, the cause should be found and corrected without delay.

# PETROL and DIESEL

A release lever for the fuel filler flap is provided on the console, between the front seats. Pull the lever up to release the flap.

The petrol cap, located under the fuel flap is a screw-on ratchet type. After refilling, tighten the cap clockwise until a clicking noise is heard, before closing the flap.

Fuel tank capacity is approx. 85 litres.




## Petrol engines

**Use UNLEADED PETROL of 91 octane rating, or higher.**

High octane unleaded petrol ("Premium" etc.) may be used, but is not required by your vehicle.

The use of any other fuel will seriously damage the engine of your vehicle and may void your Warranty. Only clean petrol of good quality should be used.

Petrol tanks should always be filled at the intermediate or fast fill rate. Don't add any more petrol after the petrol filler first clicks off or petrol blows back - as this allows room for the petrol to expand inside the tank.

It is only permissible to "trickle fill" petrol tanks when the vehicle is to be driven for more than 50 km immediately after the tank is filled. However, this is not recommended on days over 30°C.

Wipe off any overflowing petrol from the vehicle immediately; spray or splash with water.

## Diesel engines

Use a good quality diesel fuel of at least 49 cetane rating. Note, if the diesel fuel tank is run completely dry the fuel system must be "bled", refer Chapter 6.

# PETROL - EMISSION CONTROL

During the combustion process in an automotive engine, some of the fuel (hydrocarbons) fail to burn and are discharged into the engine crankcase or exhaust system. Additionally, hydrocarbons are emitted into the atmosphere through evaporation of petrol vapours from the fuel tank. Of the total hydrocarbons coming from uncontrolled automobiles, about 25% are emitted from the crankcase, 20% from the fuel system and 55% from the engine exhaust. In addition to hydrocarbons, carbon monoxide and oxides of nitrogen are also formed during the combustion process. These are also discharged into the exhaust system. There are three areas from which pollutants are emitted:

(a) Exhaust System
(b) Crankcase
(c) Fuel System

A number of controls have been installed by I-GM to control the amount of pollutants emitted from your new vehicle. It is recommended that any replacement parts used for required maintenance services or for the repair of emission control systems be new parts. Use of replacement parts which are not of equivalent quality may impair the effectiveness of such systems, and may avoid your Vehicle Warranty.

## Owner responsibility

Vehicles sold and serviced within Australia have been designed to comply with Australian Design Rules and State Regulation emission requirements.

The engine or exhaust system of the vehicle must NOT be modified in any way. Any change to the design may increase the emissions or otherwise defeat the intent of the regulations.

Any person who removes, modifies or hinders any part of the emission control system will be contravening regulations. It is also illegal to drive a vehicle modified in this way.

## Maintenance requirements

To ensure continuing compliance with the regulations you must maintain your vehicle's emission control system as per your vehicle's service manual, at the frequency shown in the Maintenance Schedule in chapter 12.

It is recommended that the necessary servicing be performed by an authorised Holden Dealer who has the specialised servicing equipment and trained personnel available to ensure that the adjustments and services specified are carried out.

# REDUCING FUEL CONSUMPTION

## Engine

Maintain the engine in peak mechanical condition by having it serviced regularly in accordance the Maintenance Schedule on Chapter 12. This will ensure items such as the spark plugs and air cleaner are maintained for minimum fuel usage and peak engine performance.

## Tyre pressure

Keep the tyres at the recommended pressures. Under-inflated tyres create extra rolling resistance and wastes fuel, refer Chapter 7.

Incorrect tyre pressures can also cause uneven and premature tyre wear.

## Wheel alignment

Maintain correct front wheel alignment. Incorrect alignment makes the front wheels drag, wastes fuel and causes uneven and premature tyre wear.

## Warm ups and idling

Avoid long engine warm ups. They are unnecessary and waste fuel. An engine takes approximately five minutes to reach its efficient operating temperature and it does this most effectively when driving.

You should also avoid long engine idling. If your have to wait for more than a couple of minutes turn off the engine to conserve fuel.

## Accelerating, driving and braking

Accelerate gently - avoid rapid starts, sudden bursts of speed and full throttle acceleration - they're certain fuel wasters.

Drive the vehicle at steady speeds where possible (after run-in). It is desirable to reach top gear as soon as possible, but under no circumstances should you force the engine to labour in top gear.

## Riding the brake

Do not rest your foot on the brake pedal when you do not intend to brake, as this can overheat the brakes, increase brake pad wear, damage the brakes and waste fuel.

## Air conditioning (if fitted)

Turn off the air conditioning, when not required. However, once every two weeks, with the engine running, switch the air conditioner on for 5 to 10 minutes, even in Winter, to lubricate seals.

## Excess weight

Fuel economy is related to the work the engine must do. The heavier the load, the more fuel it takes to run. Keep weight to a minimum by removing unnecessary cargo.

## 4WD / 2WD

Manual locking hub model: In normal driving, shift the transfer lever to 2H and ensure the hubs are unlocked.

CHAPTER 6

# Emergencies

Page


6-2 Accident
6-3 Medical assistance
6-4 Air Bags
6-6 Flat tyre
6-8 Engine overheating
6-10 Flat battery
6-12 Towing a disabled vehicle
6-13 Freeing a vehicle from sand
6-13 Power window circuit breaker
6-14 Fuses
6-15 Bleeding diesel fuel system


*Your new vehicle is covered for 3 years by 24 hour Roadside Service, refer Chapter 9.*

# ACCIDENTS

All drivers are advised to learn what to do at the scene of an accident, particularly where people are injured. Injured people can choke to death if their air passages are not cleared, they can bleed to death unless the bleeding is stopped, they may require mouth-to mouth resuscitation or may have to be moved, even though badly injured. It is important that you understand how to avoid further damaging an injured neck or back or other broken limbs .In all cases, ensure safety for the rescuers, victims and bystanders. The following notes may help.

## Accident - being involved

Stop immediately and remember to turn off the engine and apply the park brake.

Remember that time is vital. Remain calm and alert. Think quickly and clearly.

Give all possible assistance to all injured persons (see following page).

Send for police and ambulance if anyone has been injured. Give information as accurately as possible: the exact location, the number of injured people and a brief report on the overall situation.

Perhaps take charge of the situation.

Warn all other traffic approaching the scene. Turn off ignition switches. Stop any smoking near spilt petrol. In darkness, try and light up the area to warn others.

Clear the road of accident debris.

Exchange your name, address, vehicle registration, owner's name and address with the other parties involved in the accident.

If damage to property only has occurred, report the facts to the owner of the damaged property or to his/her representative, to any police present at the scene or to the nearest Police Station.

Try to note all important facts because such details may be important if needed later.

## Accident - being a witness

If you witness a road accident or it becomes your task to stop and help:

- Keep in mind that an observant witness can prove most helpful. Some day you yourself might be very glad of help from a witness.
- DO NOT stop at the scene of an accident just to be a spectator. If other people are already in attendance and giving assistance, you should stop only if you can contribute assistance.
- Give what assistance you can to any injured persons (see following page).
- Follow most of the steps suggested above. Perhaps you may have to take charge of the accident situation.

# ACCIDENTS

## Medical assistance

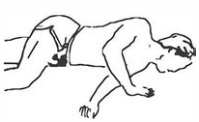
Keep calm and think clearly. Your experience may not be much but do your best.

- Look after the unconscious person first. Check airway, breathing and circulation. If no breathing, then check if air passages are clear, i.e. nose and mouth. Use your fingers to clear air passages if necessary. If the air way is clear then mouth-to-mouth resuscitation may be needed at once.

Unconscious people can choke.
Carefully turn to one side.
Tilt the head back slightly.
Wipe out the mouth with your finger to remove blood, vomit, broken teeth or dentures.

- You must be very careful when moving an injured person. It is best not to move at all, except if in danger, as serious and permanent damage can be done to an injured neck or back if not supported during movement. NEVER BEND OR TWIST A NECK OR BACK. KEEP THEM STRAIGHT. All injured limbs require support when an injured person has to be moved.

- Provided it is not dangerous to do so because of other injures, an unconscious person will do best in the position illustrated here.



Lay the person on one side and - if it will not aggravate any injuries
Bend the uppermost knee until the thigh is at right angles to the body.
Bend the uppermost arm and elbow so that the hand lies near the face.
Gently pull the underneath arm so that it rests straight on the ground, free of any body weight.

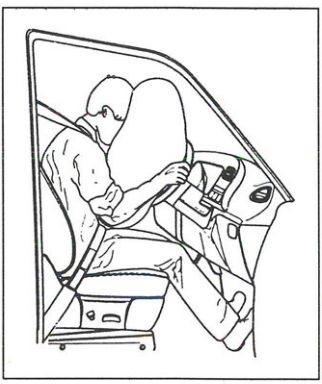
- Try to stop bleeding by applying direct pressure, using your hand, or by pressing torn flesh together. Use any clean cloth available. Fold cloths to make pads. If necessary press one pad on top of another. Keep pressure around edges of a wound BUT NEVER USE A TOURNIQUET.

- Shock may be treated by reassurance, relieving pain, controlling any bleeding and keeping the injured person warm but not hot. Best not to give any fluids and NEVER ALCOHOL.

- If the injured person is in danger and has to be moved, try and have three or four people help, concentrating on not bending or twisting the neck, spine and injured limbs. Keeping the neck and spine straight is most important.

*Illustrations reproduced from "The Victorian Road Code" with permission from Road Safety and Traffic Authority of Victoria.*

# AIR BAGS (if fitted)



If your vehicle is fitted with an air bag system the word SRS (supplemental Restraint System) will be shown on the steering wheel. This means that 2 air bags are fitted, one for the driver and another for the front passenger, which will operate as a pair - they are triggered simultaneously.

If your vehicle is involved in a severe front end collision, the air bags will inflate, assisting the seat belts to restrain forward body movement.

An operating noise may be heard and a small amount of smoke-like gas will be released. The gas is harmless and does not indicate malfunction or fire.

The air bags will then deflate - the whole process *only taking a moment.*

The air bags assist but does not replace the seat belts. Air bags are not designed to inflate if the vehicle is hit from the rear or side or the vehicle overturns.

An impact caused by dropping into a large pothole or depression in the road may or may not inflate the air bags.

*Seat belts (by law) should be worn by all passengers whenever the vehicle is moving.*

Air bags inflate with great force. If you are too close to an inflating air bag it could seriously injure you. Seat belts help keep you in position for air bag inflation in a crash.

The AIR BAG light on the instrument panel will blink 7 times when the ignition is switched ON, then go out. This is to indicate that the air bags are operational. If the light *does not* blink when the ignition is switched to ON, or if it comes on when driving this may indicate that there is a fault in the air bag system and you should contact your Holden Dealer.

If the air bag system is handled incorrectly it can be set off for up to 15 seconds after the ignition has been turned off and the battery disconnected and cause injury. Be sure to follow proper service procedures, and make sure that the person performing the work for you is qualified to do so.

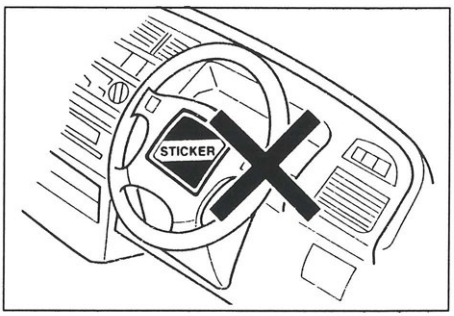
After use the whole air bag system will have to be replaced by your Holden Dealer.

The system should also be inspected by a Holden Dealer if the steering wheel or dash board area is scratched, cracked or damaged.

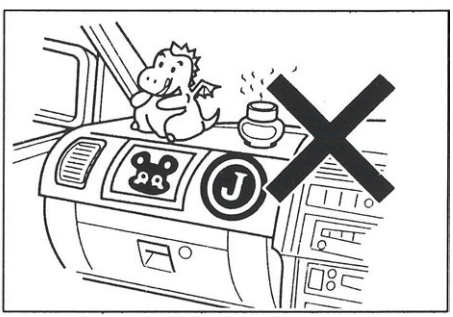
# *AIR BAGS (if fitted)*

**CAUTION:**

The horn pad must not be covered with adhesive or any other material, as this may hinder air bag operation.




The dash board area must also be kept clear with nothing around this area, hanging from the sun visor or stuck to the dash.



Extensive design and testing has gone into the air bag system. It is extremely reliable and has very little chance of accidental inflation. It should however, be treated with respect. Any careless or unskilled interference with the system could lead to its failure or to accidental inflation. Any work to the electrical system, steering column, dash board area, steering wheel or air bag system should *only* be carried out by an authorised Holden Dealer.

BULL BAR NOTE: Fitting a "bull bar", or making other modifications to the front of the vehicle, may change the impact speed which would normally cause the air bag to inflate, reducing its effectiveness.

## Passenger's side air bag and child restraints

**CAUTION:**

NEVER install a rear-facing child restraint in the front seat of vehicle with a passenger's side air bag. The child could be seriously injured if the passenger's side air bag inflates, as the back of a rear-facing child restraint would be very close to the inflating air bag.

You may install a forward-facing child restraint in the front seat, but ALWAYS move the passenger seat as far back as it will go.

It is always better to install a child restraint in the rear seat.

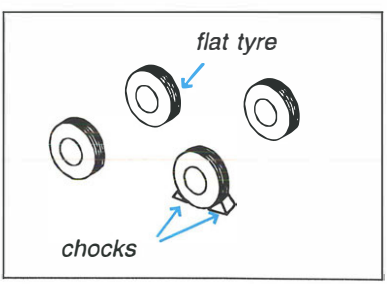
# FLAT TYRE

Driving for even a short distance on a deflated tyre can damage a tyre and wheel beyond repair.

**CAUTION:**

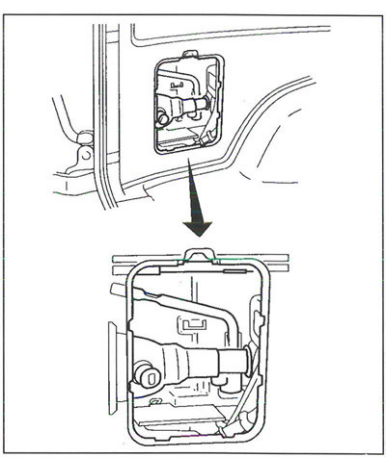
- Never use a jack designed for another vehicle to lift your vehicle, or use your jack to lift another vehicle.
- Never get beneath the vehicle when it is only supported by the jack.
- Do not start or run the engine while the vehicle is only supported by the jack.
- All passengers should be out of the vehicle when it is being jacked.
- Use the jack only at the designated lifting points. Use in other locations can cause vehicle damage.
- The vehicle should only be jacked on hard, level surfaces.
- This jack is a two-stage type. When both rams are raised and both stop marks becomes visible, stop jacking immediately. Further extension of the ram may damage the jack.

1. Park on level surface and set parking brake firmly.
2. Set automatic transmissions in park or manual transmissions in reverse. Ensure that the transfer lever is firmly in gear (2H, 4H or 4L). Remove the ignition key. Turn on the hazard warning flasher if appropriate.
3. Block the wheel diagonally opposite the flat tyre.



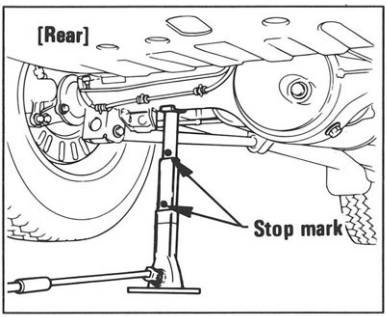

4. Remove the jack handle, jack and wheel wrench, which are installed in a compartment on the passengers side of the rear load area.

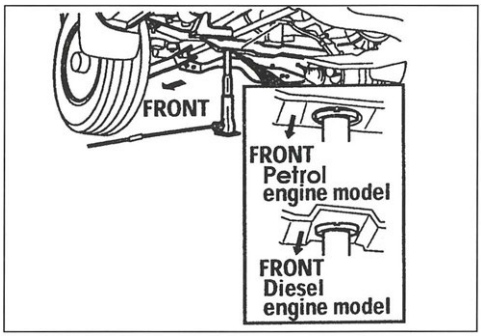
   Remove the spare wheel, mounted on the back door.
5. Remove the wheel trim.
6. Loosen, but do not remove, wheel nuts by turning the wrench anti-clockwise.
7. Insert one end of the jack rod into the jack and the other end of the jack rod through the wheel wrench. The wheel wrench then becomes an extended handle for the jack.



## FLAT TYRE

8. Position the jack under the vehicle, according to the illustration. The rear jack position is under the rear axle, near the wheel. The front jack position is at the bottom surface of the cross member.




9. Remove the wheel nuts and replace the wheel with the spare.

10. Replace the wheel nuts with the cone shaped end towards the wheel. Tighten the wheel nuts with your fingers in a criss--cross pattern. Then, tighten the wheel nuts with the wheel wrench, again in a criss cross pattern. Ensure that the wheel is seating squarely against the hub and is not tilted.

11. Lower the vehicle until the wheel touches the ground and is held from rotating. Fully tighten the wheel nuts in a criss cross pattern.

12. Replace the wheel trim.

13. Completely lower the vehicle and remove the jack using the handle in the bracket provided. The jack should be completely lowered before stowing.

14. Stow the tools and changed wheel, as shown on previous page. Note that the spare wheel fits on the tailgate with the dished side of the wheel turned to the tailgate.

**CAUTION:**

As soon as possible after changing a wheel, you should have the wheel nuts tightened with a torque wrench to 118 Newton metres (87 ft-lbs).

Wheel nuts should be tightened evenly to the correct torque in a criss-cross pattern, as wheel nuts which have not been properly tightened could eventually allow the wheel to come off while the vehicle is moving!

Never use oil or grease on wheel studs or nuts. Sparingly apply "Loctite" anti-seize compound (or similar) to wheel stud threads to prevent nuts from seizing on the thread. Anti-seize compound should not get on the tapered end of the wheel nut. To ensure this does not happen, do not apply anti-seize compound to wheel nuts, but only to the wheel studs.

## ENGINE OVERHEATING

**CAUTION:** If the engine should overheat, as indicated by the temperature gauge reading or if you suspect there is a serious overheat condition immediate action is required. Continued operation of the engine EVEN FOR A SHORT TIME could result in a fire and the possibility of personal injury and/or severe vehicle damage.

If the coolant temperature gauge needle should move all the way to the "H" position and remain there for more than 30 seconds, pull out of the traffic as soon as it is safe to do so and stop the vehicle. Leave the engine idling for a few minutes whilst you step out of the vehicle to check that the cooling fan is working. If the fan is working and the temperature gauge needle has not returned to its normal position within the time then stop the engine and proceed as follows:

**CAUTION:** Do not open the bonnet if you can see or hear steam or coolant escaping from the engine compartment. Wait until no steam or coolant can be seen or heard before opening the bonnet.

Do not remove the radiator or reservoir cap if the engine and radiator are still hot. Scalding fluid and steam can be blown out under pressure which could cause serious personal injury.

If no steam or coolant can be seen or heard, raise the bonnet. If the coolant is boiling, wait unit it stops before proceeding. Look at the coolant level in the see-through reservoir.

If the coolant level in the reservoir is lower than the "MIN" line, look for leaks at the radiator hoses and connections, heater hoses and connections, radiator and water pump. If you find major leaks, or spot other problems that may have caused the engine to overheat, do not run the engine until these problems have been corrected. If you do not find a leak or other problem, then the cooling system reservoir should be filled to the "MAX" line with specified coolant, see Chapter 7 for location if unsure.

## ENGINE OVERHEATING

Do not over fill the reservoir. The radiator filler cap should not be removed unless necessary. The coolant level should be checked regularly when the engine is cold. Supplement inhibitors or additives claiming to provide increasing cooling capability that have not been specifically approved by Isuzu-General Motors Australia Limited are not recommended for addition to the cooling system. It is the owner's responsibility to keep the freeze protection at a level commensurate with the temperature which may occur in the area of vehicle operation.

**CAUTION:** Do not remove the radiator or reservoir cap if the engine is still hot because the cooling system will blow out scalding fluid and steam under pressure which is likely to cause serious personal injury and loss of coolant.

After taking one or more of the actions above and once the temperature gauge no longer signals an overheat condition you can resume driving at a reduced speed. Return to normal driving after ten minutes if the temperature gauge does not again show an overheat condition.

If overheating occurs again you should have the vehicle attended to, as soon as possible, by a qualified mechanic.

NOTE: The engine may temporarily operate at high temperatures during more demanding operating conditions, especially on very hot days. These conditions include:

- climbing a long hill
- stopping immediately after high speed driving
- idling for long periods in traffic
- towing a heavily laden trailer or caravan.

You should avoid operating your vehicle for prolonged periods in any of the above circumstances if the temperature gauge indicates high engine coolant temperature. It may also be an advantage to turn the off the air conditioner (if fitted) in these circumstances.

# FLAT BATTERY

**CAUTION:** DO NOT "push start" or "tow start" your vehicle. If unburnt fuel were to reach the catalytic converter and ignite, the converter could overheat or be destroyed by backfire. Therefore, if the battery is flat, you can "jump start", but not "push start" your vehicle.

If your vehicle will not start due to a discharged battery, it can often be started by using energy from another battery - a procedure called "jump starting".

However, if after reading the following procedure you are still unsure about "jump starting" we strongly recommend for your safety and that of your vehicle that you leave the starting to a competent mechanic.

## Jump starting

**CAUTIONS:**

Batteries produce explosive gases, contain corrosive acids and supply levels of electrical current high enough to cause burns. Therefore, to lessen the chance of personal injury when working near a battery:

- Do not expose the battery to open flames or sparks. Battery action generates hydrogen gas which is flammable and explosive.
- Do not smoke near a battery.
- Do not use jumper leads which are in any way damaged, either with loose clamps or missing insulation.
- Wear eye protection such as industrial safety glasses and avoid leaning over the battery whenever possible.
- Do not allow battery acid to contact eyes or skin. Flush any contacted area with water immediately. In case of eye contact you should get medical help. Battery acid will also damage paint and fabrics if not washed off immediately.
- Be sure any batteries that have filler caps are properly filled with fluid.
- Remove rings, metal watch bands and other metal jewellery before working around the battery.
- Carefully follow each step in the jump starting procedures.
- Never use a quick charger to start your engine.

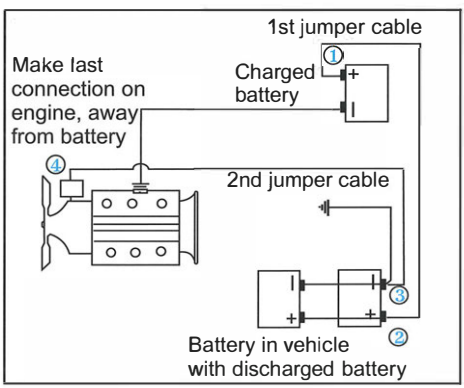
# FLAT BATTERY

1. The battery in your vehicle has a negative earth and a 12 volt rating. The battery in the other vehicle **MUST** also have a negative earth and a 12 volt rating.

2. Position the two vehicles so that they are NOT touching, apply the park brakes, put automatic transmission in PARK, manuals in NEUTRAL. Turn ignition to LOCK and switch off all lights and accessories in both vehicles, except the hazard warning flasher or any lights needed for the work area.

3. Attach one end of the RED jumper lead to the positive terminal of the charged battery (identified by a red colour, + or P) and the other end of the RED jumper lead to the positive terminal of the flat battery.

4. Attach one end of the BLACK jumper lead to the negative terminal of the charged battery (identified by a black colour, - or N) and the other end of the BLACK jumper lead to a solid stationary, metallic point on the engine of the vehicle with the flat battery. DO NOT CONNECT DIRECTLY TO NEGATIVE TERMINAL OF THE BATTERY.




5. When making all connections take care that the jumper lead clamps do not touch each other. Also, ensure that jumper leads are not on or near pulleys, fans or other points that will move when the engine is started.

6. Start the engine in the vehicle with the good battery and run the engine at a moderate speed. Then start the engine with the flat battery. Attempts to start the engine should not last longer than 15 seconds and should have an interval of 1 minute between attempts.

7. After starting, allow both engines to idle for approx. 3 minutes with the leads still connected.

8. Leave the engine running while removing the jumper leads - in the exact reverse order they were installed. While removing each clamp, take care that it does not touch any other metal while the other end remains attached.

# TOWING A VEHICLE

Proper lifting or towing equipment is necessary when lifting or towing the vehicle to prevent damage during any towing operation. Country, State and Local laws must be followed. In an emergency, your vehicle may be towed on all four wheels in the following manner:

- Fit the towing equipment to the main structural members of the vehicle. Do not attach to the bumpers or brackets.
- Place transmission in neutral position, release the park brake and ensure the transfer lever is in 2H and the wheel hubs are unlocked.
- For the sake of safety and to prevent damage to the vehicle it is advisable to avoid jerky movements and to drive slowly during towing operations.
- Do not exceed 50 km/h or tow further than 80 km. If exceeding these distances or speeds, disconnect the front and rear drive shafts at front and rear axle carriers and secure them in safe positions. For your safety, securely block the wheels while disconnecting the drive shafts.
- Vehicles with damaged transmissions, drive-lines, axles or steering should not be towed.
- A separate safety chain should be used.

## Towing with all 4 wheels on the ground

- Switch the ignition key to "OFF" position to free the steering lock. When indicating a turn or using the wipers, switch the ignition to ON when required.
- Only the driver should be in a towed vehicle.
- Remember that power assist for brakes and power steering will not be available when the engine is off.
- To prevent the entry of exhaust fumes from the towing vehicle into the passenger compartment of your vehicle, close the windows and stop entry of air by moving heating and ventilation controls to "re-circulate" position.

## Towing with wheels off the ground

Care should be taken to ensure adequate ground clearance at the opposite end of the vehicle when lifted.

In cases of rear end damage it may be necessary to lift the rear end of the vehicle and tow on the front wheels only. In such cases the steering wheel must be clamped in the straight ahead position using a clamping device designed for towing service use, such as those provided by towing equipment manufacturers. Do not use the vehicle's steering column for this purpose.

The vehicle MUST NOT be towed with the front free wheeling hubs locked, especially if it is to be towed with the rear of the vehicle lifted.

# FREEING THE VEHICLE FROM SAND, CIRCUIT BREAKER

## Freeing the vehicle from sand

If it becomes necessary to rock the vehicle to free it from sand, mud or snow, move the gear shift lever from second to reverse. Do not race the engine. For best possible traction, avoid spinning wheels when trying to free the vehicle. Use of tyre chains is recommended or temporary assistance when traction is lost on ice or snow.

**CAUTION:** Wheel spin should not exceed 55 km/h as indicated on the speedometer. Unless care is taken in limiting rear wheel spin, one spinning wheel can reach excessive speeds, resulting in possible tyre disintegration or differential failure, which could cause personal injury or extensive vehicle damage.

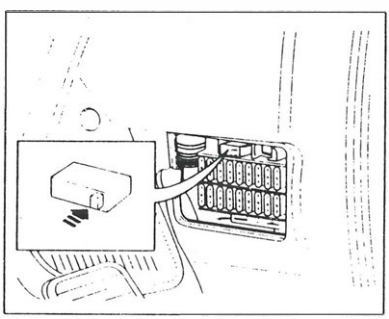
## Circuit breaker - electric windows

If the electric window switches do not work (due, say, to overloading) reset the circuit breaker (located with the fuses) under the right hand side of the dash.

First turn the ignition switch off before pushing the knob of the circuit breaker.

The switches should now operate.

However, if they still do not work, or if the circuit breaker immediately goes off again, you should see your Holden Dealer.



## FUSES

The main fuse box is located under the dash. A second fuse box is installed under the bonnet, pictured.

If a fuse has been blown out check to locate the cause of trouble and give necessary service attention before replacing the fuse. When replacing the fuse, use a cartridge of the same amperage.

If a fuse blows twice in a row a fault is indicated. The cause should be promptly located and fixed.

**Caution:** When replacing a fuse be sure to use a fuse of the specified amperage, as indicated on the fuse box panel cover. Never install a wire or similar for replacement as it may cause a fire hazard to the vehicle.

FUSE BOX UNDER DASH

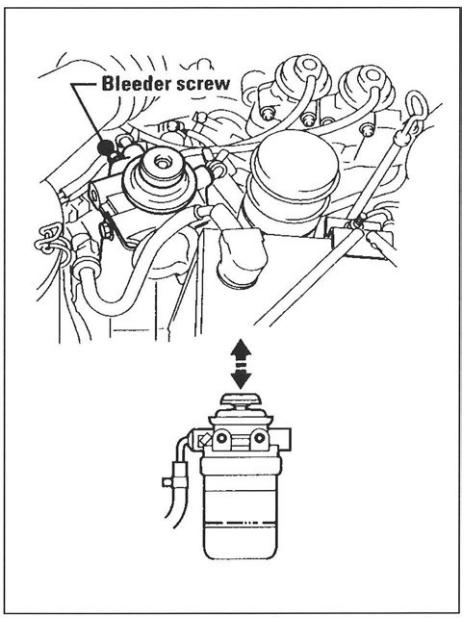
| | | |
|---|---|---|
| C-1 | 10A | Starter |
| C-2 | 15A | Seat heater |
| C3 | 10A | Turn signal light, reverse light |
| C-4 | 10A | Elect. lg. |
| C-5 | 15A | Windscreen wiper, washer |
| C-6 | 10A | Rear wiper, washer |
| C-7 | 10A | Headlight wiper |
| C-8 | 15A | Engine |
| C-9 | 15A | Petrol - ignition coil |
| | | Diesel - fuel cut |
| C-10 | 10A | Meter gauge |
| C-11 | 10A | Audio, electric mirrors |
| C-12 | 20A | Cigarette lighter |
| C-13 | 10A | Anti theft |
| C-14 | 15A | Stop lights, auto trans |
| C-15 | 20A | Audio |
| C-16 | 10A | Clock |
| C-17 | 25A | Demister |
| C-18 | 20A | Electric door locking |
| C-19 | 25A | Blower |
| C-20 | 10A | Air conditioning |
| C-21 | 10A | SRS - 1 |
| C-22 | 10A | SRS - 2 |
| Circuit break | 30A | Electic window, power seat, sunroof. |

FUSE BOX UNDER BONNET

| | | |
|---|---|---|
| F-1 | 10A | Rear sublamp |
| F-2 | 10A (petrol) | 02 sensor heater |
| | 15A (diesel) | ECM |
| F-3 | 15A | Horn, hazard |
| F-4 | 15A | Left headlight |
| F-5 | 15A | Right headlight |
| F-6 | - | - |
| F-7 | 20A | Acc socket |
| F-8 | 20A | Front fog lights |
| F-9 | 20A | ABS |
| F-10 | 15A (petrol) | Fuel pump |
| | 10A (diesel) | ECT |
| F-11 | 15A | Anti-theft |
| F-12 | 15A | Tail |
| FL-1 | 80A | Main |
| FL-2 | 80A | Starter switch |
| F-13 | 30A (petrol) | ECM |
| | 40A (diesel) | Ceramic heater |
| F-14 | 30A (petrol) | Condenser fan |
| | 50A (diesel) | ECM |
| F-15 | - (petrol) | - |
| | 50A (diesel) | Glow |
| F-16 | 40A | ABS |

## BLEEDING FUEL SYSTEM (diesel)

If the fuel tank has been emptied, the chance is that air might have entered the fuel system. With air in the fuel system, smooth flow of fuel into the engine is interrupted and to correct this, bleeding of the fuel system should be performed after refuelling.




1. With a wrench or screwdriver, loosen the bleeder screw on the fuel filter.

2. Operate the priming pump up and down until fuel comes out. Continue pumping until no air bubbles appear in the fuel being pumped out.

3. After bleeding, securely tighten the bleeder screw clockwise.

4. Operate the priming pump up and down several times.

CHAPTER 7

# Weekly checks

Page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## MISCELLANEOUS CHECKS

As well as taking your vehicle to be serviced (refer Chapter 12) there are a few simple, weekly checks that the owner (or Nominee) is required to make. These are shown on the following pages.

**CAUTION:** Engine cooling fans can start working unexpectedly, even when the engine is not running. To avoid injury from the fan, make sure the ignition key is switched OFF, so that the fan cannot start operating.

**CAUTION:** Electronic ignition systems have a high ignition power. Do not touch the ignition system; this could be highly dangerous.

The following checks should also be regularly done to ensure safety of your vehicle.

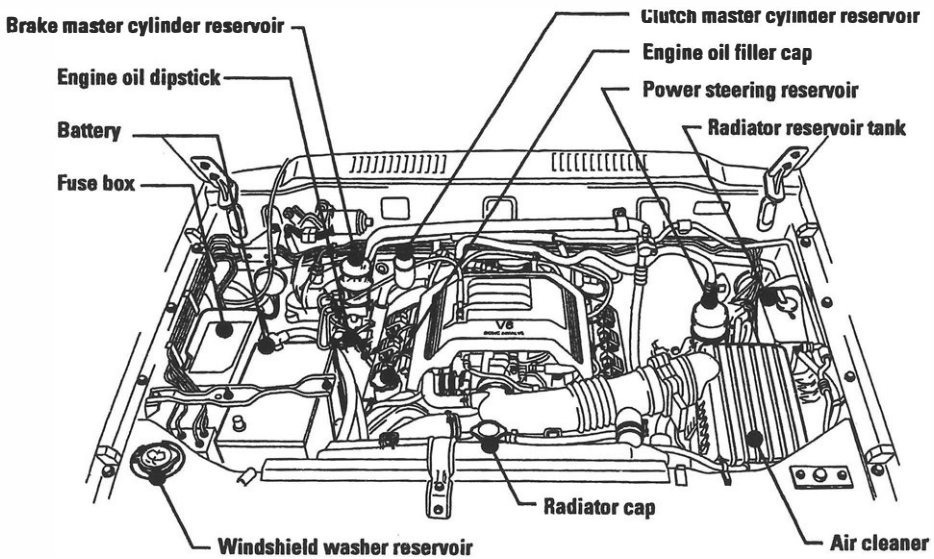
- that all exterior lights are working and that their appropriate interior indicators light up when in operation.
- mirrors and glass are clean and not scratched.
- automatic transmission T-bar indicator correctly lines up next to the gear selected.
- the aim of water on the windscreen and condition of the wipers
- demister operates
- horn works.
- condition and operation all seat belts (give it a sharp tug to make sure that it will 'lock' if necessary) and check that buckles are clean and operating correctly. Remember that seat belts must never be worn twisted.
- oil/fluid leaks
- be alert for any changes in steering action. An inspection of the steering is needed when the steering wheel is harder to turn or has too much free play or if there are unusual sounds when turning.
- be alert to any changes in the sound of the exhaust system or any smell of fumes.

### Service manuals

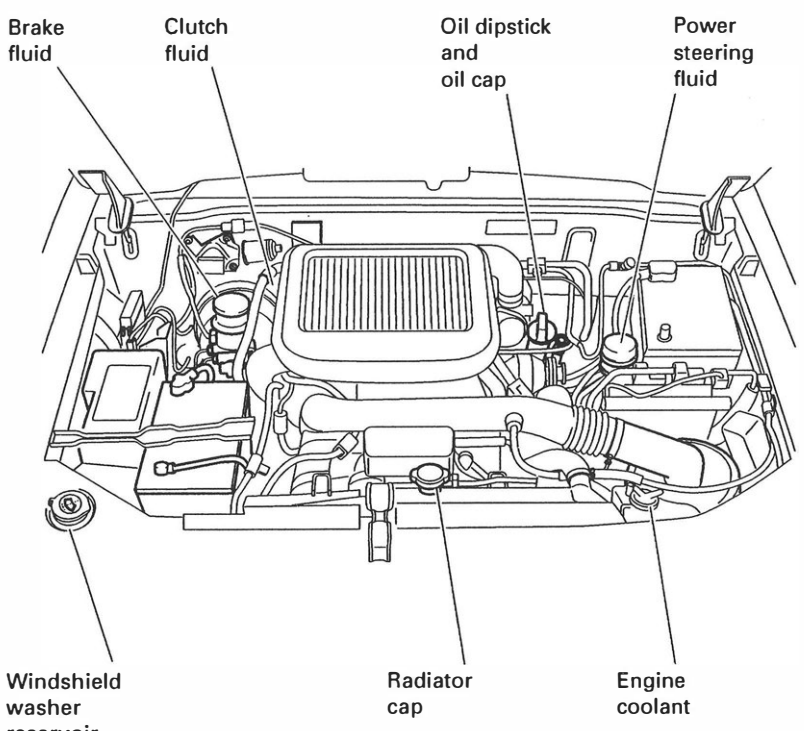
Service manuals are available from your Dealer.

# CHECK LOCATIONS

## PETROL ENGINE




## DIESEL ENGINE



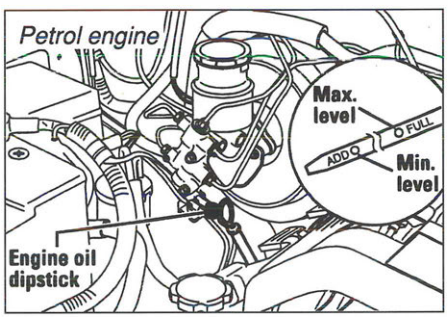
## ENGINE OIL LEVEL

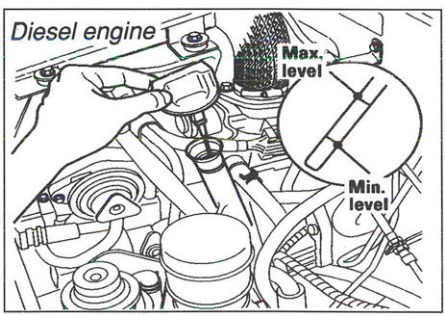
It is the owner's responsibility to check the oil level weekly. The best time to check the engine oil level is when the oil is warm, such as during a fuel stop.

To check the oil level accurately, the vehicle must be on level ground. After turning off the engine, wait a few minutes for the oil to settle.

The level is checked from the dipstick which is located on the driver's side of petrol engines and on the passenger's side of diesel engines.

Remove the dipstick and wipe it clean with a clean cloth or paper. Insert the dipstick firmly all the way down, pause for a second then withdraw the dipstick and look at the oil level on it. The oil level should be maintained between the two marks, neither going above the maximum mark nor under the minimum mark. Remember to re-insert the dipstick firmly after taking the reading.




- **Petrol** engines use SG or SH grade engine oil 20W/50 for normal use. For prolonged use in snow areas, the use of 15W/40 is recommended.
- **Diesel** engines use CG-4 or ACEA B1 or B3 rating or better, grade engine oil or 0W-X, 5W-X, 10W-X. Refer to page 8-3 for oil clarification.

If you need to add oil, remove the oil cap on top of the engine. Pour the required oil into the opening. Wait a few minutes for the oil to settle. Then check the oil level with the dipstick again. If still too low, add more oil. When correct, replace the cap and dipstick and clean up any spilt oil. If you check the oil level when the oil is cold do not run the engine first. The cold oil will not drain back into the oil pan fast enough to give a true oil level reading.

**NOTE**: Non-detergent and other low quality oils are specifically not recommended. The use of break-in oil, tune up compounds, friction reducing compounds and other supplemental additives are not recommended. Their use will increase costs, may be detrimental to the operation of your car and may void your New Vehicle Warranty, to the extent that I-GM considers the non-recommended fluid to have affected the specifications or quality of your vehicle.

# ENGINE OIL CONSUMPTION

Every internal combustion engine uses a certain amount of oil, especially when running-in. The engine is dependant on oil for lubricating the cylinder walls, pistons, rings and valve stems. A thin film of oil is left on the cylinder walls, some of which is carried into the combustion chamber and burnt during the combustion process. This also applies to the film of oil on the valve stems which is drawn into the combustion chamber and burnt.

There are several other factors that contribute to the rate of oil consumption in your engine: worn pistons, rings, valve stems and guides; the way in which the vehicle is operated; the quality and grade of oil; the oil level, and dilution of the oil.

## • Operation of the vehicle

High speed driving and heavy towing increases engine temperature, which lowers oil viscosity, causing more oil to reach the combustion chamber and get burnt away.

## • Quality and grade of oil

Oil viscosity is a significant factor in oil consumption. If you use an oil which is too "thin" (low viscosity) your oil consumption will increase. Use only the recommended grades of oil.

## • Oil level

Maintaining a proper oil level is also an important factor in controlling oil consumption. An over full engine will splash oil onto the cylinder walls in quantities greater than the piston rings can control. This excess oil will be drawn into the combustion chamber and burnt, or may result in aeration of oil in the sump causing damage to the engine.

## • Dilution

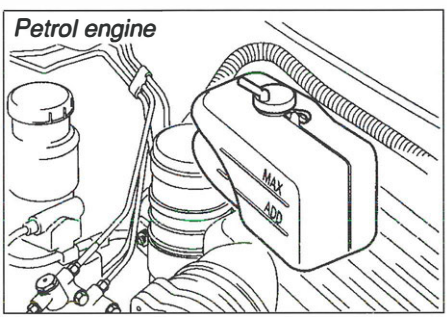
Probably the most prevalent complaint of oil consumption comes from the driver whose vehicle is frequently driven at below normal operating temperatures. The oil becomes diluted by fuel and moisture which settles in the oil pan and may even raise the oil level creating a false reading on the oil level dipstick. For example, in a vehicle that has accumulated 1,500 km of short distance or intermittent city operation and has consumed a normal amount of oil, the level may not have dropped from the FULL mark, due to dilution. If this vehicle is driven for some distance at highway speeds on a warm day, the dilution elements evaporate, lowering the oil level and the motorist assumes the oil "lost" has been consumed in the highway operation.

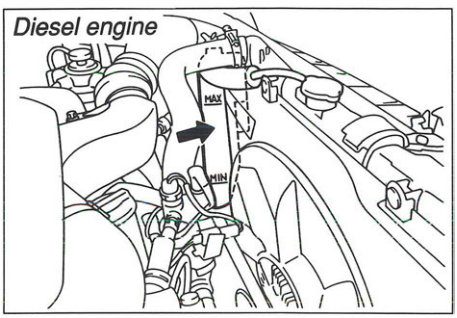
If, after taking into account the above factors you are still concerned that your engine has excessive oil consumption then you should discuss the situation with a Holden Dealer. Remember that an engine's oil consumption should not be judged until it has run at least 7,000 km.

## ENGINE COOLANT LEVEL

The level of coolant should be checked at least weekly, by looking at the level in the coolant reservoir. This is located next to the passenger's side headlight.

When the engine is cold, the coolant level should be at or above the minimum mark on the container. After the vehicle has been driven and the engine is at normal operating temperature, the level should be somewhere between half full and the maximum mark on the container. DO NOT OVERFILL.




The LONG LIFE COOLANT in your vehicle conforms to specification number HN2217. This can be purchased as:

92141458 (1 litre) or 92141457 (20 litres)

If the container requires topping up, first mix a solution of 50% LONG LIFE COOLANT and 50% water. Flip up the cap on the top of the container, add the solution and secure the cap.

Failure to use the coolant meeting Holden's specification or maintaining the specified concentration may result in voiding your warranty. In emergency situations, plain water may be used temporarily in the cooling system until the correct Holden's LONG LIFE COOLANT is obtained as soon as possible from the nearest Holden Dealer.

It should be noted that the specified LONG LIFE COOLANT contains special corrosion inhibitors for the best corrosion protection of your engine and cooling system. This LONG LIFE COOLANT also gives your cooling system greater hot weather protection by increasing the boiling point and in addition provides protection in cold weather conditions down to -20°C, provided the correct concentration is maintained.

If the recommended brand of coolant/anti-freeze fluid is not available, the radiator and cylinder case MUST be drained before parking in regions where temperatures of 0°C or below are encountered. This is to prevent possible bursting of the radiator, or cracking of the cylinder block, which can occur if the coolant freezes. Even so, damage to the heater core may still occur. Therefore, the use of the correct anti-freeze/coolant is recommended.

If you regularly have to top up the container you should see your Holden Dealer for a cooling system check.

**CAUTION:** Corrosion inhibitors and anti-freeze fluids are poisonous. Use extreme care when handling. If swallowed seek medical attention.

Refer to Chapter 6 if engine overheats.

## AUTOMATIC TRANSMISSION LEVEL

The automatic transmission fluid level will be checked by your Holden Dealer when the vehicle is serviced.

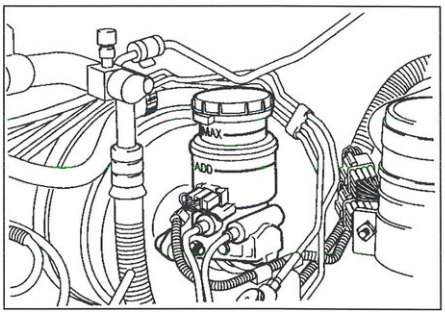
If an oil leak is seen before the service is due you should consult a Holden Dealer as soon as possible.

The transmission fluid level should be replaced at the intervals shown in Maintenance Schedule, shown in Chapter 12.

## BRAKE FLUID LEVELS

**CAUTION:**

Brake fluid is poisonous and corrosive and will damage the paint finish of your car if spilt.




The brake fluid level in the master cylinder should be checked regularly in conjunction with checking the oil and coolant levels. The fluid level, visible through the "see through" master cylinder should be maintained between the level markings on the master cylinder. If the fluid is between these levels do not remove the master cylinder cap. Remember that brake fluid exposed to the atmosphere will quickly absorb moisture which in turn lowers the boiling point of the fluid as well as increasing the risk of corrosion of brake components.

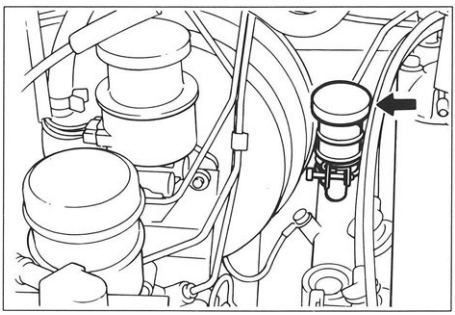
If fluid needs to be added, unscrew and lift off the top cover. Top up with DOT-3 brake fluid. Ensure that the diaphragm inside the cap is in shape before securing the cap.

Take care when handling brake fluid. Flush with lots of water is spilt on skin or your vehicle. If it gets in your eyes, flush with lots of water and see a doctor as soon as possible.

NOTE: Use only new brake fluid. Use of an old, used or inferior brake fluid may endanger the functioning of the brake system.

If the master cylinder requires constant topping up it could indicate that a malfunction exists in which case it should immediately be brought to the attention of your Holden Dealer. A gradual drop in fluid level usually occurs over a long period as the brake pads and linings wear out. This is normal. *The brake fluid must be replaced every 2 years.*

## CLUTCH FLUID LEVEL



If your vehicle is fitted with a manual transmission then the clutch fluid level should be checked weekly. The level should be maintained between the minimum and maximum markings.

The same fluid is used for both the brake system and the clutch system. So, if fluid needs to be added use DOT-3 brake fluid. Take care when handling the fluid. Flush with lots of water if spilt on skin or your vehicle. If it gets in your eyes, flush with lots of water and see a doctor as soon as possible.

If fluid often needs to be added, see your Holden Dealer to have the clutch checked.

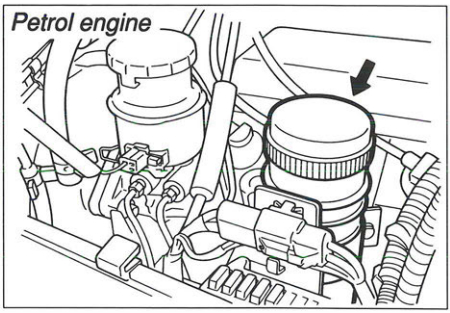
## POWER STEERING FLUID LEVELS

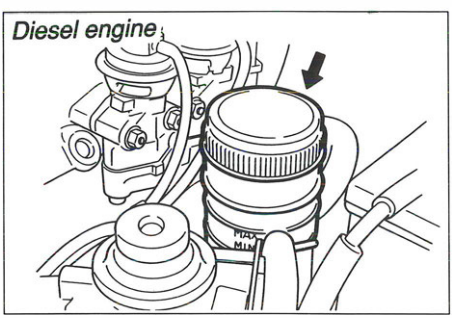
The level of fluid in the power steering reservoir should be checked weekly.

The best time to check is after the vehicle has been driven for a while, so that the fluid is warm. A convenient time to do this is at a fuel stop.

The level should be maintained between the level markings on the outside of the reservoir.

If fluid needs to be added, use DEXRON® III. Do not fill over the maximum level and remember to replace the cap tightly. If you often need to add fluid, you should see your Holden Dealer to have the power steering system checked.



## WASHER FLUID LEVEL

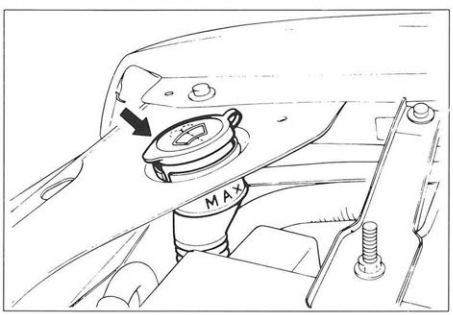
NOTE: Damage to the washer motor may result if a washer button is held depressed when the washer tank is empty. Front and rear washer tanks should be frequently checked and topped up. The more often washer water is used (as in bad weather) the more often the level should be checked.

### Windscreen/headlight washer container

To check the level, flip up the cap. The level should never read below the empty mark. Add fluid to bring the level to the MAX mark on the outside of the container.

The container should be filled only with plain water or Optikleen (part no. 92140005). Do not use ordinary soap or detergent as these not only froth up but may damage the wiper rubbers.

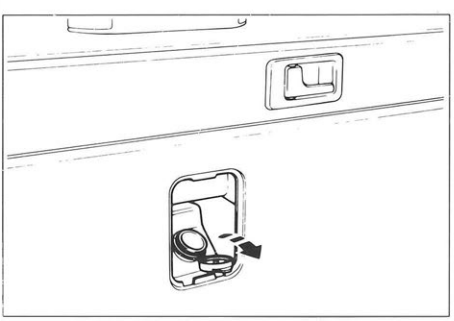
Make sure the cap is secured.




### Rear window washer container

The washer container is installed inside a panel in the tailgate.

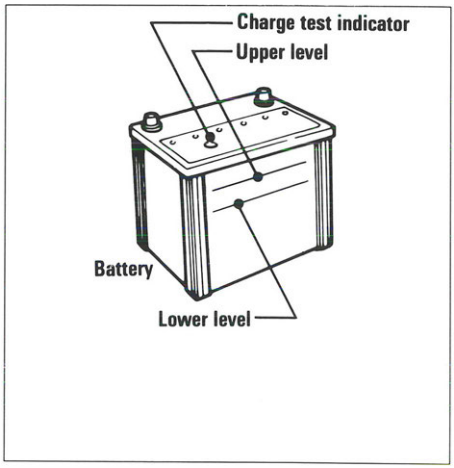
The container should be filled only with plain water or Optikleen.



# BATTERY

## Battery without filler caps

You will never have to add water. The test indicator in the top of the battery is provided for information testing purposes only.




## Battery with removable filler caps

The fluid level of the battery will be checked for you when you take your vehicle to be serviced by your Holden Dealer. If your vehicle is operated in hot temperatures or at constant high speed, the battery fluid level should be checked at least twice between the 6 month Dealer Service.

**CAUTION:**

Batteries emit an explosive gas mixture which may be ignited by sparks or naked flames. You should therefore keep sparks and flames away from the battery at all times. Never smoke near a battery.

Batteries contain sulphuric acid. If acid contacts skin or clothing, flush immediately with a lot of water. In case of eye contact, flush with a lot of water and contact a doctor immediately.

Take care with all metal objects and tools including items you may wear (e.g. jewellery, ring and metal watch bands) near battery terminals. Metal objects that touch battery terminals can cause sparks and serious heat burns to the user or wearer.

When checking the battery level, make sure the engine is not running. Each of the six cells must be individually checked. Use distilled water, as required, to keep the level just below the bottom of each split tube. DO NOT OVER FILL.

Refer Chapter 6 for emergency starting when the battery is flat.

# TYRES

## Tyre air pressure

Checking the air pressure of your tyres (including the spare) ensures your SAFETY, as well as reducing fuel consumption and increasing the life of your tyres.

Make sure your vehicle will handle at its best - CHECK THE PRESSURES WEEKLY. For constant long distance or rough road travelling, daily checking is recommended.

Refer to the tyre placard for the correct pressure for your tyres. This is located on the driver's door lock pillar, visible when the door is open. Tyre pressures are also listed in Chapter 8.

Tyre inflation pressure increases when the tyres have been driven more than 1.5 km. The pressure should be checked when the TYRES ARE COLD (stationary for over 3 hours).

Always use a TYRE PRESSURE GAUGE to check the tyres - simply looking at the tyres is not sufficient, as under inflated radial tyres may look similar to correctly inflated radial tyres.

Remember to put back any valve DUST CAPS or EXTENSIONS if so equipped. This stops dirt and moisture from fouling the valves. Damaged dust caps should promptly be replaced.

Your tyres must be inflated to the correct cold inflation pressures (as listed on the tyre placard) in order to load the vehicle to the maximum weights given in Chapter 3. Too low an air pressure causes increased tyre flexing and heat build-up. This weakens the tyre and increases the chance of damage of failure. It can result in tyre overloading, abnormal tyre wear, adverse vehicle handling and reduced fuel economy. Too high an air pressure can result in abnormal wear, harsh ride and can increase the chance of damage from road hazards.

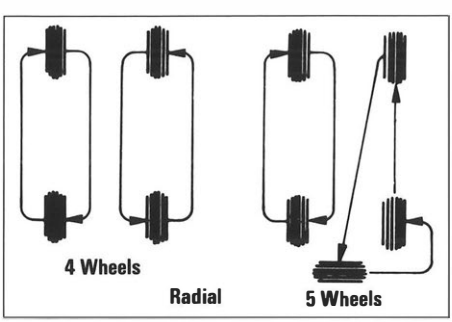
When checking the tyre air pressure, take a look at the condition of the TYRE TREAD for stones or abnormal wear.

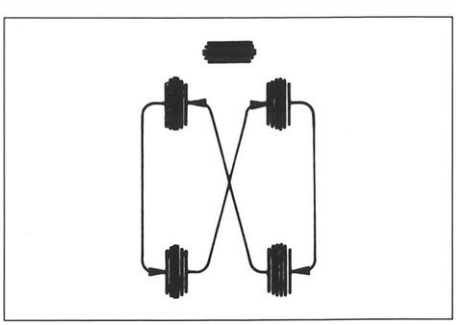
## Alignment and balance

If no abnormal or uneven wear is evident and if you have not experienced any vibration, tyres need not be rotated. Wear can be evened out by rotating the tyres.

Your Holden Dealer will be able to diagnose any unusual signs of wear and can also balance the wheels and tyres or correct the wheel alignment if necessary.

The optional "X" pattern rotation is acceptable when required for more uniform tyre wear.



## *TYRES cont.*

### Tyre replacement

To avoid unpredictable handling, always have exactly the same tyres of all 4 wheels. That is, the same manufacturer, model and size. Especially, don't mix different ply tyres on your vehicle.

Wrong combinations of replacement tyres and wheel may result in change to tread measurement, resulting in unpredictable handling and stress to steering and suspension. Use only the tyres the wheels approved for your vehicle.

Whenever possible, all 4 tyres on a 4WD vehicle should be replaced at the same time.

If you replace all tyres with tyres of a different size, your speedometer readings may be affected. Have the vehicle checked afterwards.

Tyres with a higher speed rating and/or with a maximum load rating in excess of that listed on the tyre placard are acceptable as replacements, provided they are fitted to a suitable rim size. This does not however mean that your vehicle can carry loads greater than those listed in Chapter 10. Uneven or abnormal tyre wear is usually the result of incorrect inflation pressure, improper wheel alignment, wheels being out of balance, or poor driving habits.

The original equipment tyres incorporate built-in tread wear bars which act as indicators to assist in determining when the tyres have worn excessively. When the wear bars appear, the tyre should immediately be replaced.

Tread wear indicators

### Wheel replacement

Wheels should be replaced if damaged, for example if rusted, bent, cracked or if wheel nuts often become loose. Steel wheels that allow air to leak should be replaced, aluminium wheels can often be repaired.

Replacement with used wheels is not advised as they may have been subjected to harsh treatment and could fail without warning.

When replacing wheels for any reason, ensure that the new wheels are equivalent in diameter, rim width, offset and mounting configuration to those originally installed in your vehicle. A wheel(s) of the wrong size or type can affect load carrying capacity, wheel and bearing life, brake cooling, speedo accuracy, stopping ability, headlight aim, bumper height, vehicle ground clearance and tyre chain clearance.

Before fitting wheels, remove any build-up corrosion on the mounting surface and brake disc mounting surface by scraping and wire brushing. Installing wheels without good metal-to-metal contact can cause the wheel nuts to loosen, which could result in a wheel coming off while driving.

# *TYRES cont.*

## Tyre traction

When driving on wet or slushy roads, it is possible for a wedge of water to build up between the tyre and road surface. This phenomenon, known as hydro-planing, may cause partial or complete loss of traction, which adversely affects vehicle control and stopping ability. To reduce the possibility of traction loss, the following precautions should be observed.

1. Reduce speed levels during rainstorms or when roads are slushy and if the road has standing water or puddles.
2. Replace tyres when tread is worn down to 1.6 mm.
3. Check that tyres are properly inflated.

Vehicle speed should be limited to 120 km/h if your vehicle is fitted with passenger car-type snow tyres.

## Tyre damage and repair

Tyres with cuts, splits or cracks deep enough to expose the fabric, should be replaced. Bulges (indicating internal damage) should also be replaced. Tyres with doubtful damage should be removed from the wheel and examined by a competent person.

If a pressure loss occurs while driving, do not attempt to drive on the deflated tyre more than is necessary to stop safely. Driving even a short distance on a deflated tyre can damage it beyond repair.

When puncturing objects are removed, repairs will have to be made according to the recommendations of the tyre manufacturer. If the tyre has a puncture or cut that can't be repaired due of the size or location, then the tyre must be replaced.

It should always be remembered that a tyre which has been repaired will not be able to be operated safely at the rated maximum speed and due care should be taken.

## Snow chains and tyres

### Chains

- Install the chains on the rear tyres only.
- Do not exceed 70 km/h or the chain manufacturer's suggested speed limit, if lower.
- Drive in a restrained manner and avoid large bumps, potholes, severe turns or other manoeuvres which could cause the vehicle to bounce up and down.
- Follow the chain manufacturer's instructions.

### Tyres

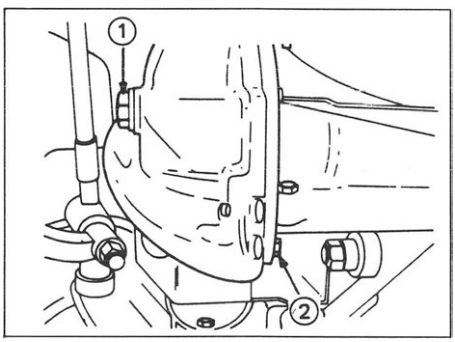
If your vehicle has snow tyres, be sure they are the same size, load range and construction type as your other tyres. Vehicle speed should be limited when equipped with snow tyres.

## AFTER CROSSING WATER

The following levels will be checked for you when you take your vehicle to your Holden Dealer for servicing. It is recommended that after crossing deep water the following oil levels should be checked as soon as possible: • rear axle, • front axle, • transfer case, • engine (see earlier in this Chapter) and • automatic transmission or manual transmission

If the level has increased (indicated by fluid running out of the filler hole) it could be caused by water entry. The water is heavier than oil and will therefore sit on the bottom. If the level is increased, drain a cupful of oil from the drain plug to check for water contamination or colour change (the oil should be clear). If there is any evidence of water the oil should be replaced so as to avoid serious vehicle damage. If you are unsure, you should contact your Holden Dealer.

### Front axle



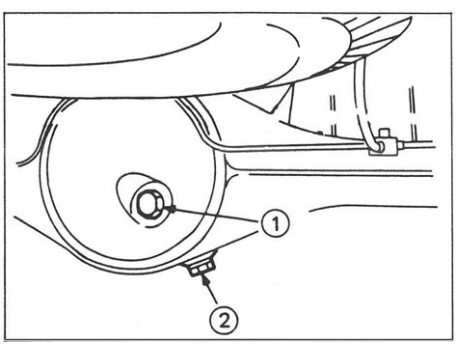

To ensure a correct reading, the vehicle should be parked on a flat surface. For your safety place automatic transmissions in "Park" or manual transmissions in first gear. Ensure that the park brake is firmly applied.

Remove the filler plug ① and feel inside the hole with your finger. The oil should come to the bottom edge of the hole. Replace the plug and tighten it.

The correct type of oil is listed in Chapter 8.

After replacing the plug, visually check the transfer case for leaks or damage. Hole ② is the drain plug.

### Rear axle

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Replace the plug and tighten it.

After replacing the plug, visually check the transfer case for leaks or damage. Hole ② is the drain plug.

If your vehicle is equipped with the optional limited slip differential (rear axle), use GL-5 Limited Slip Differential Gear Lubrication together with Limited Slip Differential Lubricant Additive (part no. 1052358, 112g) or equivalent. Use the correct viscosity the the existing ambient temperature. Note: Failure to use the correct Additive may result in a chattering noise and/or excessive vibration.

# AFTER CROSSING WATER

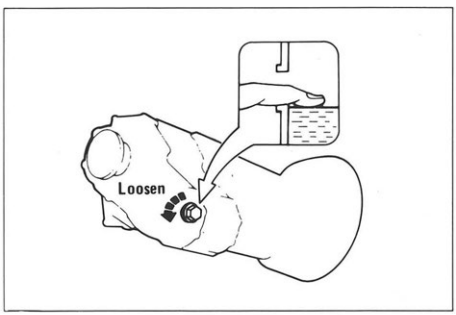
## Automatic transmission fluid and manual transfer case oil

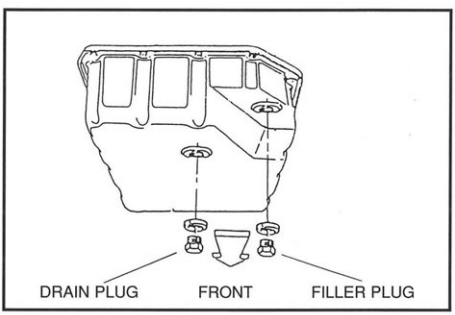
To ensure a correct reading, the vehicle should be parked on a flat surface. For your safety, check that the T-bar lever is in Park and the park brake firmly applied.

See the scheduled maintenance list in Chapter 12 to find out how often the lubricant level should be checked.

Check that the fluid level reaches the plug hole by removing a filler plug on the transfer case. If the fluid level is low, refill the case up to the filler plug hole.

After replacing the plug, visually check the transfer case for leaks or damage.



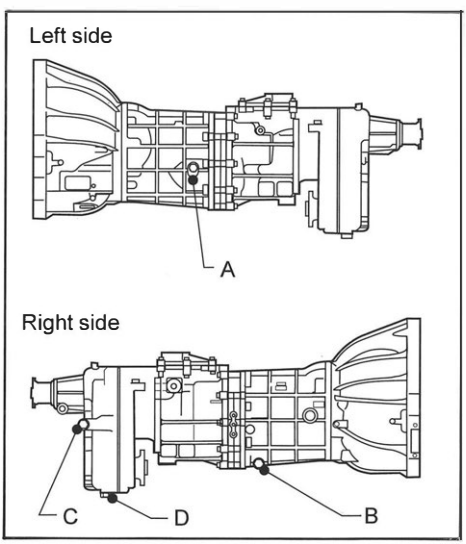




## Manual transmission oil and manual transmission transfer case oil

To ensure a correct reading, the vehicle should be parked on a flat surface. For your safety place automatic transmissions in "Park" or manual transmissions in first gear. Ensure that the park brake is firmly applied.

A = Transmission filler plug
B = Transmission drain plug
C = Transfer filler plug
D = Transfer drain plug

Remove the filler plug and feel inside the holes with your finger. The oil should come to the bottom edge of the hole. Replace the plug and tighten it. Use the same oil in the manual transmission and the transfer case as is used in the engine.
After replacing the plug, visually check the transfer case for leaks or damage.



CHAPTER 8

# Specifications

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8-2 Engines
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8-4 Clutch
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8-5 Wheel alignment
8-6 Dimensions
8-6 Tyre pressures
8-7 Electrical
8-8 Identification plates

# ENGINES

| Engine | PETROL 6VE1 | DIESEL - 4JX1 |
|---|---|---|
| Description | 6 cylinder, 24 valve, overhead cam, electronic fuel injection | 4 cylinder, turbo, overhead cam |
| Piston displacement | 3,494 cc | 2,999 cc |
| Compression ratio | 9.1 : 1 | 19.0 : 1 |
| Power | 158 kW @ 5,400 rpm | 118 kW @ 3,000 rpm |
| Torque | 310 Nm @ 3,000 rpm | 333 Nm @ 2,000 rpm |
| Cold valve clearance | 0.28 mm (intake)<br>0.38 mm (exhaust) | 0.15 mm (intake)<br>0.25 mm (exhaust) |
| Coolant cap. | 9.1 litres (auto trans)<br>9.2 litres (manual trans) | 9.3 litres |
| Coolant spec. | 50% water and 50% coolant conforming to Holden HN2217 spec. | |

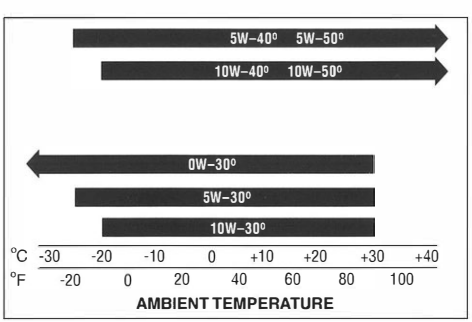
# ENGINES

## Oil

| | | PETROL | DIESEL |
|---|---|---|---|
| Oil | Capacity | 4.7 litres (with filter)<br>4.0 litres (without filter) | 7.5 litres (with filter)<br>6.5 litres (without filter) |
| | Specifications | SG or SH grade oil.<br>For normal use, 20W/50 viscosity is recommended.<br>For prolonged use in cold areas, the use of 15W/40 is recommended. | Minimum grade of API CG-4 or ACEA B1 or B3 viscosity of 0W-X, 5W-X or 10W-X (where X can be 30, 40 or 50 please refer to chart below).<br>Note: Oil pressure is used to operate the fuel injectors in your diesel engine. Use of the incorrect oil can cause the following:<br>• Poor cold weather starting<br>• Poor idle quality<br>• Excessive smoke<br>• Poor performance |

**Oil Selection**

**Viscosity Chart**



# TRANSMISSIONS and AXLES

## Transmission & transfers

| | | MANUAL | PETROL AUTO with torque converter | DIESEL AUTO with torque converter |
|---|---|---|---|---|
| Gear ratios : 1 | 1st | 3.954 | 2.856 | 2.804 |
| | 2nd | 2.330 | 1.618 | 1.532 |
| | 3rd | 1.436 | 1.000 | 1.000 |
| | 4th | 1.000 | 0.723 | 0.705 |
| | 5th | 0.780 | - | - |
| | Rev | 3.918 | 2.000 | 2.494 |
| | High | 1.000 | 1.000 | 1.000 |
| | Low | 2.050 | 2.050/2.480 (TOD) | 2.050/2.480 (TOD) |
| Transmission oil capacity | | 2.7 litres | 8.6 litres (dry fill) 3.8 litres (service fill), refer page 6-8. | 8.7 litres (dry fill) |
| Transfer oil capacity | | 1.45 litres | 1.45 litres 1.9 litres @ TOD | 1.45 litres 1.9 litres (TOD) |
| Transmission oil specification | | Use same oil as used in engine, or SAE 5W/30 or gear oil 75W/85 | Dexron ® III Automatic Transmission Fluid | |
| Transfer oil specification | | Use same oil as used in engine, or SAE 5W/30 or gear oil 75W/85 | Use same oil as used in engine, or or SAE 5W/30 or gear oil 75W/85 / Dexron ® III Auto Transmission Fluid (TOD) | |

## Rear axle

| | |
|---|---|
| Ratio | All = 4.300 : 1 |
| Oil cap. | 3 litres |
| Oil type | GL5 grade for Limited Slip Diff and 1 bottle additive part no 10523580 |
| Viscosity | SAE 85W/140 |

## Front axle

| | |
|---|---|
| Ratio | All = 4.3 : 1 |
| Oil cap. | 1.4 litres |
| Oil type | GL5 grade (Limited Slip Differential type can be used) |
| Viscosity | SAE 85W/140 |

# BRAKES, STEERING, CLUTCH

## Brakes

| | |
|---|---|
| Description | Front wheel disc. Rear wheel disc, incorporating park brake acting on rear wheels. |
| Fluid type | DOT 3 or DOT 4 brake bluid |

## Steering

| | |
|---|---|
| Type | Power |
| Ratio | 15.8 : 1 |
| Oil capacity | 1 litre |
| Oil type | Dexron ® III |

## Clutch

| | |
|---|---|
| Description | Dry single plate disc with diaphragm spring, hydraulic control |
| Size | Petrol = 260 mm<br>Diesel = 250 mm |
| Fluid | DOT 3 |

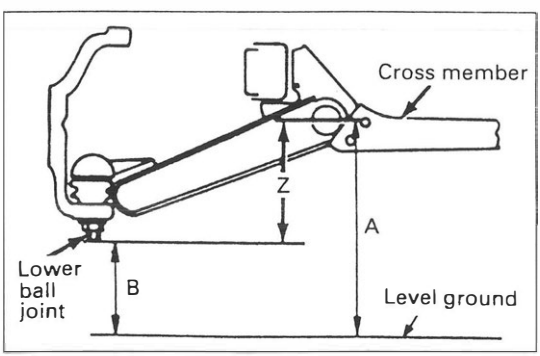
# LUBRICANTS, WHEEL ALIGNMENT

## General lubricants

| | |
|---|---|
| Chart system pivot points, bonnet pivots and spring anchor, bonet and door hinges, body door hinge pins and linkage, fuel door hinge rear compartment lid hinges, key lock cylinder | Apply a thin film of light engine oil |
| Clutch fork joint, bonnet latch release pawl, chassis lubrication, park brake cables, drive shaft yoke, accelerator linkage | Water resistant EP Chassis grease |
| Door weather-strips, rubber hood bumpers | Lightly coated with a rubber lubricant |
| Universal joints | Grease containing MoS2 (molybdenum disulfide type grease) |

## Front wheel alignment

Trim Height (Z): 139 ± 5 mm




| | |
|---|---|
| Toe-in | 0 degrees ± 2 mm |
| Camber | 0 degrees ± 30' |
| Caster | + 2 degrees 10' ± 45' |

# *DIMENSIONS and TYRE PRESSURES*

## Dimensions

| | | | |
|---|---|---|---|
| Wheelbase | 2 door | | 2330 mm |
| | 4 door | | 2760 mm |
| Overall length | 2 door | | 4340 mm |
| (including spare tyre) | 4 door | | 4770 mm |
| Overall width | 1745 mm | | |
| Overall height | 2 door | | 1835 mm |
| (at curb weight) | 4 door | | 1840 mm |
| Minimum ground clearance | Diesel | | 170mm at GVM |
| | Petrol | | 195mm at GVM |
| Wheel track | Front | 215/80 R16 | 1455 mm |
| | | 245/70 R16 | 1470 mm |
| | Rear | 215/80 R16 | 1460 mm |
| | | 245/70 R16 | 1475 mm |

## Tyre pressures

| Nominated rim size and tyre size designation | Recommended cold inflation pressure (in kPa) up to maximum load. | |
|---|---|---|
| | FRONT | REAR |
| 16 x 7JJ<br>245/70 R16 107S | 210 | 240 |
| 16 x 7JJ<br>LT 225/75R16 106S | 210 | 260 |
| 16 x 7JJ<br>LT 235/70R16 110/108N | 210 | 260 |

# ELECTRICAL SPECIFICATIONS

## Fuses

Refer Chapter 6.

## Light bulbs

| APPLICATION | BULB | QUANTITY | WATTAGE |
|---|---|---|---|
| FRONT LIGHTS | | | |
| Headlight (halogen) | H4 | 2 | 60/55 |
| Turn signal | P-25-1 | 2 | 21 |
| Park lights | R19/5 | 2 | 5 |
| Side turn signal | W10/5 | 2 | 5 |
| Fog light | H3 | 2 | 55 |
| REAR LIGHTS | | | |
| Reverse | P-25-1 | 2 | 21 |
| License | W10/5 | 2 | 5 |
| Tail, stop | P-25-2 | 4 | 5/21 |
| Turn signal | P-25-1 | 4 | 21 |
| INTERIOR ILLUMINATION | | | |
| Dome light | - | 1 | 10 |
| Map light | - | 2 | 5 |
| Luggage compartment light | - | 1 | 8 |
| Courtesy light (on door) | 194<br>194 | 4 (4 door<br>2 (2 door) | 3.8<br>3.8 |
| Glovebox | - | 1 | 1.2 |
| Ashtray | 74 | 1 | 1.4 |

## Battery

| BATTERY SPECIFICATION | PETROL ENGINE | DIESEL ENGINE (2 batteries) | |
|---|---|---|---|
| | | AUTO | MANUAL |
| Type | 65D25R | 80D26R | 75D26R |
| Voltage | 12 | 12 | 12 |
| Cold cranking performance | 420 amp | 582 amp | 490 amp |
| Reserve capacity | 113 min | 133 min | 123 min |

# *IDENTIFICATION PLATES*

## Engine number location

### Petrol

The engine number is stamped on the passenger's side of the cylinder block near the starter. You can see the engine number through the wheel housing by turning the wheel.

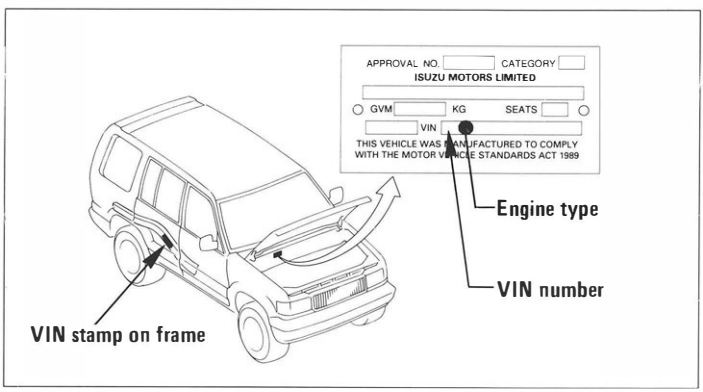
### Diesel

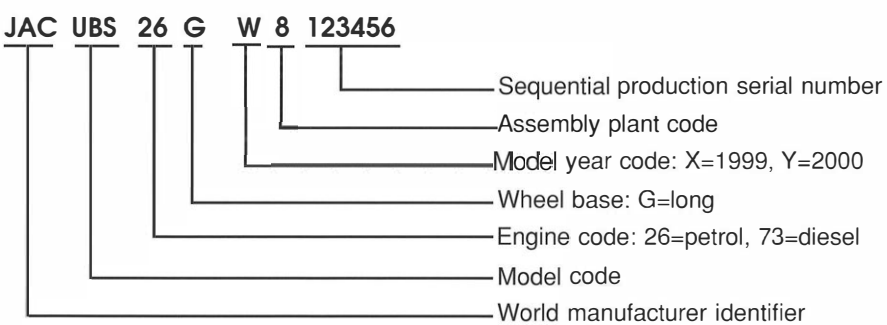
The engine number is stamped on the rear passenger's side of the cylinder block.

## Vehicle identification number

The individual I.S.O.V.I.N. number is used for identification of parts.

The explanation of the I.S.O.V.I.N. is shown below.




## Holden Identification Plate

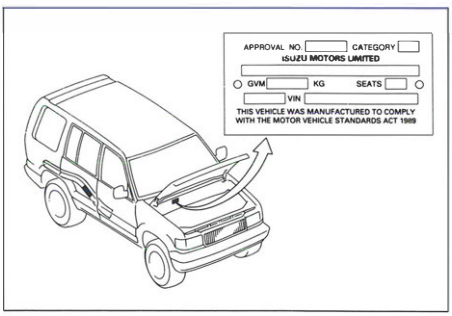
The Holden Identification Plate is located on the passenger's side of the radiator support panel.

The Holden number is used for warranty identification, Roadside assist identification etc.

# *IDENTIFICATION PLATES cont.*

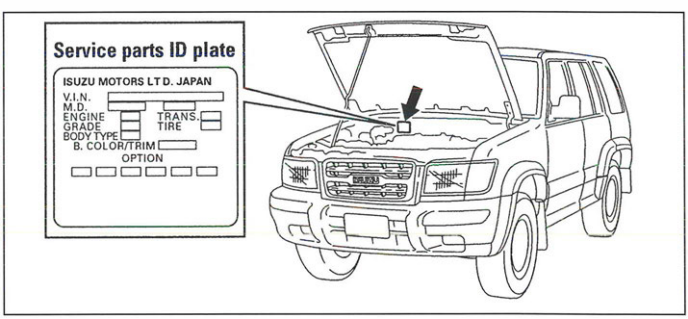
## Safety compliance plate

Shown on this plate are the Approval numbers, Category, Manufacturer's Name, Model name and Model code, G.V.M. (Gross Vehicle Mass), Seating Capacity, Build date and V.I.N. (Vehicle Identification Number).




## Body & option identification plate (Service parts ID plate)

The built date (shown on this plate) is defined as "the date of manufacture" by calendar month and year in which the body shell and power train sub-assemblies are co-joined or moved from the production line.




## Tyre pressure placard

The tyre placard is on the driver's door lock pillar, visible when the door is open.

## Emission label

The emission label is located on the under side of the bonnet.

CHAPTER 9

# After sales

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9-2 New Vehicle Warranty
9-4 Parts and Accessories Warranty
9-5 Warranty questions & answers
9-8 Roadside Assistance
9-10 Customer assistance
9-11 Authorised Holden Dealers


Note: Dealership names and details may change after the printing of this Handbook. The list contains both Authorised Holden Dealers and Authorised Holden Service Operations.

# NEW VEHICLE WARRANTY CERTIFICATE

## New Vehicle Warranty application

This Warranty is given by Isuzu-General Motors Australia Ltd. A.C.N. 006 962 572, ("I-GM"). The Warranty applies to the vehicle identified on the inside front cover of this Owner's Handbook. It is provided to the original and subsequent owners/operaters driving the vehicle within Australia during the Warranty Period.

This warranty is given in addition to all rights conferred by law on that person.

## Australian vehicles

This Warranty is only applicable to vehicles purchased and operated in Australia.

Owners of vehicles purchased in Australia but operated overseas should consult the local dealer in the country of operation about any Warranty applicable to their vehicle. This Warranty does not apply for Holden vehicles exported overseas. Similarly, this Warranty is not provided for vehicles purchased overseas and imported into Australia.

## Repairs covered

Subject to the exclusions shown on the following page, this Warranty covers the correction, during the Warranty Period, of any vehicle defect related to materials or workmanship and advised to a Holden Dealer or Authorised Service Outlet, by repair or at I-GM's option by replacement.

## Warranty Period

The coverage commences from the date of delivery (or in the case of a demonstrator vehicle the date when the vehicle was first placed into service by the Dealer). The coverage expires at the end of the period of 3 years after the commencement date or after the vehicle has travelled 100,000 kilometres, whichever occurs first.

## No charge

Warranty work undertaken (including parts and labour) will be carried out at no cost to the vehicle owner. However, this work should not be confused with servicing specified in the Maintenance schedule in Chapter 12 of this Owner's Handbook for which a charge is payable.

## NEW VEHICLE WARRANTY CERTIFICATE cont.

### Warranty exclusions

- **Damage**

Your Warranty does not extend to following causes of damage:

Damage caused by an accident, fire, theft or moving objects striking the vehicle.

Damage caused by industrial fallout, chemicals or sealants.

Damage caused by atmospheric fallout or flood, hail, salt, etc.

- **Maintenance items**

Services such as, brake adjustment, replacement of filters, wiper rubbers etc., which are required as part of normal vehicle maintenance.

- **Tyres**

The tyres (and tubes where applicable) fitted to your vehicle are not covered by this warranty. However, they may be covered by the tyre manufacturer.

- **Batteries**

Batteries are warranted for 12 months from the commencement date of the warranty.

- **Misuse**

The warranty does not cover damage caused by:

(a) misuse or abuse of the vehicle such as by racing, rallying, overloading, etc., or neglect

(b) operation of the vehicle after the defect is known

(c) failure to carry out proper maintenance services

(d) use of incorrect types and grades of fuel, oil or lubricants

(e) alteration of the vehicle by anyone not authorised by I-GM

(f) fitting of parts or accessories not marketed by I-GM

(g) any work carried out on the vehicle by anyone except an authorised Holden Dealer or Service Dealer.

# PARTS AND ACCESSORIES WARRANTY

I-GM warrants I-GM approved Parts and Accessories ("Parts" and "Accessories") for the periods and on the conditions set out below. The Warranty covers the correction, during the relevant Warranty Period, of defects in any such Parts and Accessories, by repair or at I-GM's option by replacement.

- **Accessories installed to the new vehicle**

  I-GM approved Accessories installed by a Holden Dealer or authorised Service Outlet to the new vehicle at the time of purchase are covered together with the New Vehicle warranty for the period of 3 years or 100,000 km, whichever occurs first.

- **Parts and Accessories installed after new vehicle delivery by a Holden Dealer or authorised Service Outlet**

  Parts and Accessories installed after delivery by a Holden Dealer or authorised Service Outlet are covered for 2 years or 50,000km (whichever occurs first). If the vehicle is still within the New Vehicle Warranty the Parts and Accessories are covered by the longer of:

  2 years/50,000 km (whichever occurs first)

  or

  the end of the New Vehicle Warranty.

  As an example, an Accessory installed in a 7 month old car would be covered until the end of the New Vehicle Warranty; an Accessory installed in a 2½ year old car would be covered until the end of 4½ years or a further 50,000km from when the Accessory was installed.

- **Purchased at retail or trade**

  Parts and Accessories purchased at trade or retail and installed by other than a Holden Dealer or authorised Service Outlet are warranted for 1 year from the date of purchase. Please keep a receipt to support warranty claims.

  The Warranty does not cover the labour costs of removal / reinstallation of Parts and Accessories when installed or rectified by other than a Holden Dealer or authorised Service Outlet.

- **Parts and accessories warranty exclusions**

  The tyres (and tubes where applicable) are not covered by this warranty. However, they may be covered by the tyre manufacturer.

  Batteries are warranted for 12 months from date of purchase.

  Parts which are required as part of normal vehicle maintenance are warranted against manufacturing defect at the time of installation.

# *WARRANTY QUESTIONS*

This section is designed to assist you in understanding the I-GM Warranty provided with your new vehicle.

The following are some of the most frequently asked questions, for which detailed answers have been provided.

**Q 1. How do I go about obtaining I-GM Warranty Service?**

It is the responsibility of the Selling Dealer to provide I-GM Warranty service, therefore you should take your vehicle to the Selling Dealer whenever I-GM Warranty service is needed. However, if this is not possible, you may go to any other Authorised Holden Dealer. The details recorded inside the front cover of this handbook will be required by the Dealer.

**Q 2. What should I do if my vehicle becomes unsafe or inoperative as a result of a defect which is covered by the IGM New Vehicle Warranty?**

You should contact the nearest Authorised Holden Dealer or I-GM Customer Assistance Service (refer further in this chapter) as soon as possible, and arrange for that Dealer to carry out the required I-GM Warranty Service.

**Q 3. What should I do if, in an emergency, I-GM Warranty service is required and an Authorised Holden Dealer is not available to provide such service at the time?**

If, in an emergency, a repair, replacement or adjustment (covered by the I-GM New Vehicle Warranty) is required to enable your vehicle to be operated safely and it is *not* practical for you to go to an Authorised Holden Dealer, the service (to the extent that it is necessary to enable your vehicle to be operated safely) may be performed by any other qualified mechanic or repairer. A claim for the reasonable cost may be made through the Authorised Holden Dealer who would normally provide you with I-GM Warranty Service. You must also take your vehicle to the Authorised Holden Dealer for inspection of the service and/or completion of any required I-GM Warranty Service, as soon as possible.

Note: During normal business hours you should seek authorisation from your nearest Authorised Holden Dealer or I-GM Customer Assistance Service, prior to repairs being commenced.

**Q 4. Are damage or injury, loss of time, inconvenience, commercial or other direct or indirect loss covered by the I-GM Warranty?**

No, these items are not covered. I-GM warranty only covers the repair, replacement or adjustment of those parts of your vehicle which are found to be defective in materials or workmanship. No other types of claim for compensation of any kind, even if the same resulted from a consequence of a defect in materials or workmanship in your vehicle, will be recognised under the I-GM New Vehicle Warranty.

You may have rights under the law to claim compensation outside of the I-GM New Vehicle Warranty, but any claim based on those rights should be separately pursued.

## *WARRANTY QUESTIONS cont.*

### Q 5. Will I have to pay for maintenance costs during the Warranty Period?

Maintenance costs are not covered by the I-GM New Vehicle Warranty.

The Maintenance Schedules in this handbook specify the *minimum* maintenance required for your vehicle operating under normal conditions.

The Maintenance items (except where they are required as a result of defects in materials or workmanship) for which you will have to pay for include:

- Clutch facings
- Engine tune-up, including spark plugs replacement.
- Replacement of all filters.
- Cleaning or flushing of fuel, coolant, brake, engine, transmission, differential, power steering etc., after 5,000 km.
- Adding to (or replacing) lubricants.
- Adding to (or replacing) air conditioning refrigerant, after 5,000 km.
- Any necessary adjustments to drive belts, transmissions, clutch, park brake etc.
- Wheel balancing - after 5,000 km.
- Wheel alignment.
- De-dusting or de-glazing of brake linings or pads - after 5,000 km.
- Brake lining wear or damage.
- Brake disc pad or disc wear.
- Battery re-charging.
- Paint, bright metal finish and trim, due to normal deterioration.
- Body panel adjustment - after 5,000 km.
- Door, or bonnet lock adjustments.
- Glass or channel adjustments - after 5,000 km.
- Body rattle, squeaks and general tightening of bolts, fastenings and fittings - after 5,000 km.
- Chipped glass or breakage.
- Torn or damaged floor mats or carpets.

### Q 6. Are my tyres covered by the I-GM New Vehicle Warranty?

No. The tyres fitted to your vehicle are covered by a separate warranty provided by the tyre manufacturer. Any Authorised Holden Dealer will assist you by discussing any queries which you might have with respect to the tyre manufacturer's warranty with the tyre manufacturer's representative.

## *WARRANTY QUESTIONS cont.*

**Q 7. Will I have to pay for any costs or expenses in connection with the provision of I-GM Warranty service?**

All parts and labour used in carrying out I-GM Warranty Service at the premises of the Servicing Dealer are free of charge. Whenever I-GM Warranty service is to be carried out by the Servicing Dealer it is your responsibility to deliver your vehicle to the Servicing Dealer's premises.

If, as a result of a defect which is covered by the I-GM New Vehicle Warranty, your vehicle cannot be driven safely and you arrange for the nearest Authorised Holden Dealer to carry out the required I-GM Warranty Service, I-GM will accept reasonable towing costs to move your vehicle to the nearest Holden Dealer's premises. Before employing a towing company, contact the nearest Holden Dealer and/or I-GM Customer Assistance Service (refer page 10 of this chapter) to obtain guidance.

**Q 8. Would my vehicle's engine benefit from fuel additives, oil additives or coolant additives not marketed by I-GM ?**

The use of break-in oil, tune-up compounds, friction-reducing compounds and other supplemental additives is not recommended; their use will not only increase operating costs, but may also be detrimental to the operation of your vehicle.

Only the fluids and lubricants referred to in this handbook should be used.

## UNAUTHORISED STATEMENTS IN RELATION TO HOLDEN'S PRODUCTS

No Holden Dealer or other person is authorised or permitted to give or make any statement assertion or undertaking in relation to the quality, performance, characteristics, descriptions or fitness for any purpose of any I-GM product or in connection with the supply of any I-GM product, which is at variance with any written statement assertion or undertaking on any of these subjects given or made by I-GM in its published sales literature, and the Company does not accept any such unauthorised action.

# ROADSIDE ASSISTANCE

## 3 YEAR
## 24 HOUR ROADSIDE ASSISTANCE

### Our commitment to your satisfaction

Holden's Roadside Assistance is part of the unequalled commitment by Holden to provide total motoring satisfaction.

From the moment delivery is made, our aim is to provide the finest possible ownership experience, from design through manufacturing to servicing and now beyond to the open road, Australia wide.

We hope the need never arises, but if it does, we'll be there to help through Holden Roadside Assistance.

### How does Holden Roadside Assistance work?

Holden Roadside Assistance is provided by Holden Limited., and delivered by the collective resources of the Australian Automobile Clubs and Associations (the constituents of Assist Australia) the AA.

### Which vehicles are covered by the service?

As of 1st November 1993 all new Holden passenger and light commercial vehicles are covered for 36 months.

Holden Roadside Assistance is extended to private and business vehicles, taxis, rental companies, all government and fleet operators.

### What will Holden Roadside Assistance do for me?

Holden Roadside Assistance is designed to get you mobile on any road that is trafficable to normal two wheel drive vehicles. In the event of the unexpected happening, from your keys being locked in your car to mechanical and accident advice, help is readily available by simply calling the toll free number 1800 817 100.

All Holden luxury vehicles receive the added benefits of Holden Roadside **Ultra** Assist which includes accommodation, alternative transport, rental car, assistance in case of accident, theft and medical emergency and Australia wide vehicle recovery.

### Can I upgrade to Roadside Ultra assist?

Yes, owners can upgrade to Holden Roadside **Ultra** Assistance for a fee by dialling 1800 645 668.

# ROADSIDE ASSISTANCE cont.

### When do the benefits begin?

Cover begins from the date of first registration. An interim card entitles you to immediately receive all the benefits of Holden Roadside Assistance.

### Where can I get Roadside Assistance?

Holden Roadside Assistance is available to you at home, or at the roadside, anywhere in Australia, should you need it.

### Is there a membership or joining fee?

No, Holden Roadside Assistance is complimentary with every new Holden passenger vehicle and light commercial vehicle for 36 months from the date of first registration.

### What will Holden Roadside Assistance cost me?

Materials, fuel and spare parts must be paid for at the time of service. The service personnel attending will issue a receipt for these expenses. Reimbursement of expenses covered by Holden's warranty can be claimed by contacting the local dealer.

### What happens if I sell my vehicle?

Holden Roadside Assistance stays with the vehicle, so if you sell your vehicle during the 36 month period, it is still eligible for the service. The new owner simply registers for the service by using the change of ownership form supplied in the Roadside Assistance booklet.

### How do I call for assistance?

Simply call Holden Roadside Assistance toll free on 1800 817 100 from anywhere in Australia. For further information regarding the service and full terms and conditions, refer to the Roadside Assistance Kit in the glovebox or call the toll free Customer Assistance Service Line on 1800 033 349.

# CUSTOMER ASSISTANCE

We want you to be happy with your new vehicle, together with the people you deal with while you have the vehicle.

Normally, any problems with the sales, operation or servicing of your vehicle will be handled by your Dealer's Sales and Service Department.

We realize however, that with the best intentions, misunderstandings do occur sometimes.

Therefore, we suggest you discuss any concern with one of the Holden Dealer's management people. If you haven't received satisfaction from the Sales Manager or Service Manager - go to the General Manager or to the Dealer Principal.

By now you should have satisfaction. If not, the I-GM Customer Assistance office is at your disposal.

The Holden and Isuzu Customer Assistance representatives can be telephoned from anywhere within Australia for only the cost of a local call. The Melbourne area number is 9646 5466. Outside the Melbourne Metropolitan area, the number is 1800 033 349.

If your concern relates to parts/accessories and you have made contact with the Dealer or Distributor without satisfaction, you may contact Holden's Service Parts Operations on (03) 9797 7341. Naturally, telephoning is the quickest and the best way to contact. However, if you prefer to write the address is:

The Manager

Holden and Isuzu Customer Assistance Centre

GPO Box 1714

Melbourne, 3001.

Your letter should clearly outline your concern or query, and include the following:

- Your name and address
- Telephone numbers, both private & business
- Servicing Dealership's name and address
- Vehicle model
- Vehicle identification number (I.S.O.V.I.N.), refer to the inside front cover of this Handbook.
- Date of purchase
- Current odometer reading

Most of this information will be found on the Vehicle Identification Certificate, located inside the front cover of this Handbook.

Before you write however, remember that the telephone is the quicker and more efficient means of communication.

# HOLDEN DEALERS

## N.S.W. Metropolitan

**ARNCLIFFE**
Suttons Motors Arncliffe P/L
93 Princes Highway
P: (02) 9335 9000 FAX: (02) 9335 9006
**ASHFIELD**
Muirs Holden
252 Parramatta Road
P: (02) 9798 8888 Fax: (02) 9799 7010
**BALGOWLAH**
James Langfield Holden
164 Condamine Street
P: (02) 9949 1888 Fax: (02) 9949 7237
**BANKSTOWN**
Princeton Holden
466 Chapel Road
P: (02) 9790 1234 Fax: (02) 9790 0033
**BLACKTOWN**
West City Holden
120~128 Sunnyholt Road
P: (02) 9622 7333 Fax: (02) 9671 7394
**CAMPBELLTOWN**
Paul Wakeling Holden
Cnr Blaxland & Campbelltown Rds
P: (046) 281 444 Fax: (046) 283 262
**CASTLE HILL**
Windsor Road Holden
Cnr Victoria Ave/Windsor Rd
P: (02) 9894 6666 Fax: (02) 9894 5600
**CHATSWOOD**
Sundell Holden
Cnr Smith & Gibbes Street
P: (02) 9417 8431
**CHULLORA**
Suttons Motors (Chullora) P/L
Cnr Hume Hwy/Waterloo Rd
P: (02) 9642 0233 Fax: (02) 9642 7798
**DEE WHY**
Peninsula Holden
Cnr May & Mooramba Roads
P: (02) 9982 1311 Fax: (02) 9982 3755
**GORDON**
Sundell Holden
Cnr Pacific Hwy/Mclntyre St
P: (02) 9498 7766 Fax: (02) 9498 2906
**HOMEBUSH**
Suttons Motors Homebush P/L
112 Parramatta Road
P: (02) 9746 4500 Fax: (02) 9746 7206
**LAKEMBA**
Fulton Holden Lakemba
817 Canterbury Road
P: (02) 9740 5555 Fax: (02) 9740 5907
**LANSVALE**
Lansvale Holden
266~284 Hume Highway
P: (02) 9728 7333 Fax: (02) 9726 1085
**LIVERPOOL**
McGrath Holden
411~419 Hume Highway
P: (02) 9602 8399 Fax: (02) 9821 1993
**NEWPORT**
Newport Car Care Centre
340 Barrenjoey Road
P: (02) 9999 1254
**PARRAMATTA**
Boyded Holden Parramatta
65 Church Street
P: (02) 9204 6666 Fax: (02) 9635 6346
**PENNANT HILLS**
Barry Smith Holden
351~355 Pennant Hills Road
P: (02) 9418 8222 Fax: (02) 9484 7475
**PENRITH**
Penrith City Holden
Cnr Henry St & Macquarie Pl
P: (047) 321 966 Fax: (047) 215 896
**ROCKDALE**
Peter Terry Holden
571 Princes Hwy
P: (02) 9567 0321 Fax: (02) 9597 7395
**ROSEBERY**
Suttons City Holden
Link Road
P: (02) 9931 3000 Fax: (02) 9931 3001
**RYDE**
Hunter Holden
603~605 Victoria Road
P: (02) 9808 9123 Fax: (02) 9809 6592
**SPRINGWOOD**
Springwood Holden
15 Ferguson Road
P: (047) 511 911 Fax: (047) 512 481
**ST LEONARDS**
Hunter Holden
4 Herbert Street
P: (02) 9906 4044 Fax: (02) 9439 4635
**ST. MARY'S**
John Young Holden
Cnr Glossop & Harris Streets
P: (02) 9673 2111 Fax: (02) 9673 4932
**SUTHERLAND**
Greg Ball Holden
499~505 Princes Highway
P: (02) 9545 4811 Fax: (02) 9545 2533
**WAITARA**
Suttons Motors Waitara P/L
90 Pacific Hwy
P: (02) 9487 2222 Fax: (02) 9489 0009
**WINDSOR**
Hawkesbury Valley Holden
18 Macquarie Street
P: (045) 774 077 Fax: (045) 772 592

## N.S.W. Country

**ARMIDALE**
New State Motors
103 Rusden Street
P: (060) 562 333 Fax: (060) 247 899
**BALLINA**
Quayside Motors
Pacific Highway
P: (066) 865 111 Fax: (066) 868 574
**BARHAM**
Hall's Motors Pty Ltd
44 Noorong Street
P: (03) 5453 2092 Fax: (03) 5453 1064
**BATEMAN'S BAY**
Surfair Holden
30-32 Orient Street
P: (044) 725 111
**BATHURST**
Bathurst Motors Pty Ltd
54 Durham Street
P: (063) 312 077 Fax: (063) 319 177

# HOLDEN DEALERS CONT.

**BEGA**
Bega Valley Holden
Cnr Upper and Gibbs Sts
P: (064) 922 333 Fax: (064) 923 105
**BELMONT**
Challenge Holden
444 Pacific Highway
P: (049) 454 313 Fax: (049) 451 054
**BLAYNEY**
Alan May Auto. Services
98 Adelaide Street
P: (063) 682 745 Fax: (063) 683 257
**BOMBALA**
Delcott Engineering Pty Ltd
Maybe Street
P: (064) 583 341 Fax: (064) 583 940
**BOOROWA**
Boowowa Auto Repairs
40 Marsden Street
P: (063) 853 305
**BOURKE**
Bourke Smash Repairs
12 Richard Street
P: (068) 722 217 Fax: (068) 722 217
**BREWARRINA**
Lukas Holden
Bathurst Street
P: (068) 392 105 Fax: (068) 392 454
**BROKEN HILL**
Donlee Motors Pty Ltd
Cnr Galena & Rakow Streets
P: (08) 8087 2463 Fax: (08) 8087 7971
**CAMDEN**
Paul Wakeling Pty Ltd
15 Cawdor Road
P: (046) 557 100
**CANOWINDRA**
Canowindra Motors
Gaskill Street
P: (063) 441 105 Fax: (063) 441 105
**CARDIFF**
Brian Kelly Holden
35~39 MacQuarie Road
P: (049) 547 733 Fax: (049) 549 407
**CASINO**
Casino Holden
142 Barker Street
P: (066) 622 822 Fax: (066) 622 101
**CESSNOCK**
Geoff Boyd Holden
Cnr Wollombi Road and Darwin Street
P: (049) 903 800 Fax: (049) 911 544
**COBAR**
Cobar Holden
Cnr Lewis St & Louth Road
P: (068) 364 007 Fax: (068) 363 409
**COFF'S HARBOUR**
Geoff King Holden
Cnr Pacific Hwy and Thompson Road
P: (066) 522 288 Fax: (066) 525 360
**COOMA**
Summit Holden
66~70 Sharp Street
P: (064) 521 077 Fax: (064) 521 142
**COONABARABRAN**
Coonabarabran Holden
24 Charles Street
P: (068) 421 499 Fax: (068) 422 473

**COONAMBLE**
Moody's Motors
37 Aberford Street
P: (068) 221 161 Fax: (068) 221 624
**COOTAMUNDRA**
Jenkins Garage
111 Wallendoon Street
P: (069) 422 522 Fax: (069) 421 493
**COWRA**
Waugoola Motors Pty Ltd
Kendal Street
P: (063) 421 800 Fax: (063) 423 614
**CROOKWELL**
Crookwell Autos
114 Goulburn Street
P: (048) 321 433 Fax: (048) 322 157
**DENILIQUIN**
Burchfield Bros & Co
112~114 End Street
P: (03) 5881 2133 Fax: (03) 5881 3322
**DORRIGO**
Phil Noble Motors
46~48 Hickory Street
P: (066) 572 017 Fax: (066) 572 217
**DUBBO**
John Kierath
54 Bourke Street
P: (068) 821 011 Fax: (068) 827 102
**DUNGOG**
Turner Holden
248 Dowling Street
P: (049) 921 816 Fax: (049) 921 833
**EDEN**
Ron Doyle
113 Imlay Street
P: (064) 961 420 Fax: (064) 961 467
**FINLEY**
Riverina Garage Finley
104 Murray Street
P: (03) 5883 1211 Fax: (03) 5883 1638
**FORBES**
Frank Spice Holden
20~22 Dowling Street
P: (068) 511 755 Fax: (068) 522 825
**GILGANDRA**
Gilgandra Holden
3 Morris Street
P: (068) 471 888 Fax: (068) 471 277
**GLEN INNES**
Glen Severn Holden
167 Grey Street
P: (067) 322 888 Fax: (067) 323 394
**GLOUCESTER**
Grahame's Garage Pty Ltd
1 Park Street
P: (065) 581 108 Fax: (065) 582 317
**GOSFORD**
Noble Holden
Pacific Highway
P: (043) 250 511 Fax: (043) 241 043
**GOULBURN**
Geissler Motors
279~298 Auburn Street
P: (048) 213 744 Fax: (048) 219 798
**GRAFTON**
Ken Casson Holden
37~39 Turf Street
P: (066) 426 666 Fax: (066) 426 737

# HOLDEN DEALERS cont.

**GRENFELL**
Terry Carroll Motors Pty Ltd
40 Alexandra Street
P: (063) 431 522 Fax: (063) 431 347
**GRIFFITH**
Leo Franco Holden
164~166 Yambil Street
P: (069) 642 977 Fax: (069) 624 916
**GUNNEDAH**
Namoi Valley Motors
48 Barber Street
P: (067) 420 211 Fax: (067) 423 842
**GUNNING**
Bailey's Garage
Yass Street
P: (048) 451 224 Fax: (048) 451 486
**HARDEN**
Ginty & O'Leary
Cnr Station & Albury Streets
P: (063) 862 320 Fax: (063) 862 722
**HAY**
Royce Curtis Motors
168 Lachlan Street
P: (069) 931 503 Fax: (069) 932 212
**HOLBROOK**
Lieschke Motors Pty Ltd
Albury Street
P: (060) 362 244 Fax: (060) 362 831
**INVERELL**
Gaukroger Sales Pty Ltd
Vivian Street
P: (067) 222 722 Fax: (067) 221 804
**JERILDERIE**
Jerilderie Motors
Jerilderie Street
P: (03) 5886 1302 Fax: (03) 5886 1734
**KANDOS**
Chrisfield Holden
11 Angus Street
P: (063) 794 204 Fax: (063) 794 606
**KATOOMBA**
Katoomba Holden
136 Great Western Highway
P: (047) 321 966 Fax: (047) 825 546
**KEMPSEY**
Thoroughgood Holden
118~132 Belgrave Street
P: (065) 621 381 Fax: (065) 621 383
**KIAMA**
Glen Fulton Holden
35~41 Collins Street
P: (042) 321 888 Fax: (042) 323 062
**KYOGLE**
O & H Holden
128~134 Summerland Way
P: (066) 321 711 Fax: (066) 322 552
**LEETON**
John Ryan Holden
47 Pine Street
P: (069) 532 466 Fax: (069) 536 725
**LISMORE**
John Chant Motors Pty Ltd
21~27 Carrington Street
P: (066) 212 601 Fax: (066) 224 659
**LITHGOW**
Lithgow City Holden
255 Main Street
P: (063) 514 555 Fax: (063) 514 653

**MACKSVILLE**
Eastland Auto Centre
18~22 Cooper Street
P: (065) 681 711 Fax: (065) 681 816
**MACLEAN**
O'Halloran Motors
175 River Street
P: (066) 452 844 Fax: (066) 454 003
**MAITLAND**
Heritage Holden
Cnr New England Hwy & Bungaree St
P: (049) 320 779 Fax: (049) 320 473
**MOREE**
Keith Haddad Holden
Cnr Boston & Heber Streets
P: (067) 521 855 Fax: (067) 521 298
**MORUYA**
Surfair Holden
88 Vulcan Street
P: (044) 742 555 Fax: (044) 742 129
**MOSS VALE**
Vagg & Partners Holden
160~162 Argyle Street
P: (048) 681 055 Fax: (048) 683 330
**MULLUMBIMBY**
Tony Carsburg Holden
2 Argyle Street
P: (066) 842 066 Fax: (066) 842 066
**MUDGEE**
Ross Granata Motors
47~55 Market Street
P: (063) 721 766 Fax: (063) 723 735
**MURWILLUMBAH**
Tweed Motors Murwillumbah
29 Prospero Street
P: (066) 724 444 Fax: (066) 725 811
**MUSWELLBROOK**
Upper Hunter Motors Pty Ltd
116 Bridge Street
P: (065) 432 577 Fax: (065) 432 565
**NAMBUCCA HEADS**
Nambucca Holden
Mann Street
P: (065) 689 477 Fax: (065) 689 477
**NARRABRI**
Allan Cooper Holden
181 Maitland Street
P: (067) 923 488 Fax: (067) 924 750
**NARROMINE**
Terry Green Holden
45~51 Dandaloo Street
P: (068) 891 244 Fax: (068) 892 277
**NEWCASTLE**
Newcastle City Holden
745 Hunter Street
P: (049) 615 301 Fax: (049) 616 485
**NOWRA**
Glendon Motors Holden
301~313 Princes Highway
P: (044) 210 144 Fax: (044) 230 854
**ORANGE**
Canobolas Holden
348 Summer Street
P: (063) 620 155 Fax: (063) 613 702
**PARKES**
Broderick Motors Holden
Cnr Mitchell & Clarinda Sts
P: (068) 622 266 Fax: (068) 621 406

# HOLDEN DEALERS cont.

**PEAK HILL**
S. Leary & Sons Pty Ltd
Mingelo Street
P: (068) 691 459
**PORT MACQUARIE**
Bob Todd Motors Pty Ltd
115 Gordon Street
P: (065) 831 100 Fax: (065) 849 508
**QUIRINDI**
Browning Motors
82 Henry Street
P: (067) 461 666 Fax: (067) 461 422
**SCONE**
Upper Hunter Motors (Scone)
100 Liverpool Street
P: (065) 451 355
**SINGLETON**
Lancaster Holden
80 John Street
P: (065) 721 700 Fax: (065) 724 033
**TAMWORTH**
Kensell's Holden
Cnr Bourke St & Kable Ave
P: (067) 666 699 Fax: (067) 667 339
**TAREE**
Hardes Auto House
Beeton Parade
P: (065) 521 000 Fax: (065) 521 269
**TEMORA**
Rod Lovering Holden
607-608 Stockinbingal Road
P: (069) 772 255 Fax: (069) 772 033
**TENTERFIELD**
Sexton & Green (Sales & Service) P/L
148 Rouse Street
P: (067) 361 855 Fax: (067) 361 946
**TUNCURRY**
Great Lakes Holden
144 Manning Street
P: (065) 556 644
**TUMUT**
Nancarrow Holden
35 Fitzroy Street
P: (069) 471 311 Fax: (069) 473 386
**TWEED HEADS**
Tweed Motors Pty Ltd
75~79 Pacific Highway
P: (075) 363 411 Fax: (075) 364 490
**ULLADULLA**
Alan May Holden
169 Princes Highway
P: (044) 551 213 Fax: (044) 554 122
**WAGGA WAGGA**
Wagga Motors Pty Ltd
32 Dobney Avenue
P: (069) 253 411 Fax: (069) 253 283
**WALCHA**
Bowden's Garage Pty Ltd
Derby Street
P: (067) 772 226 Fax: (067) 772 319
**WALGETT**
Walgett Garage Pty Ltd
81 Wee Waa Street
P: (068) 281 088 Fax: (068) 281 198
**WALLA WALLA**
D.E. Lieschke & Son Pty Ltd
Commercial Street
P: (060) 292 202 Fax: (060) 292 134
**WARIALDA**
Roger Moore
Hope Street
P: (067) 291 570 Fax: (067) 291 104
**WARILLA**
Wilson's Holden
29 Shellharbour Road
P: (042) 951 223 Fax: (042) 961 007
**WARREN**
Fuller Bros
Dubbo Street
P: (068) 474 978 Fax: (068) 474 477
**WEE WAA**
Allan Cooper Holden
Rose Street
P: (067) 954 255
**WELLINGTON**
Gersbach's Garage Pty Ltd
92 Lee Street
P: (068) 452 733 Fax: (068) 453 236
**WESTWYALONG**
West Wyalong Motors
183 Main Street
P: (069) 722 388 Fax: (069) 722 570
**WOLLONGONG**
Dwyers City Holden
31~33 Crown Street
P: (042) 299 222 Fax: (042) 295 105
**WYONG**
Barry Robertson Holden
172 Pacific Highway
P: (043) 512 588 Fax: (043) 521 759
**YASS**
Bill Nesbitt Holden
221 Comur Street
P: (062) 261 866 Fax: (062) 261 747
**YOUNG**
Harden & Geelan Holden
48 Boorowa Street
P: (063) 821 155 Fax: (063) 824 673

## A.C.T.

**BELCONNEN**
Gerald Slaven Holden
Josephson Street
P: (062) 515 111 Fax: (062) 531 298
**BRADDON**
Rolfe Holden
44 Mort Street
P: (062) 487 888 Fax: (062) 571 328
**PHILLIP**
Commonwealth Motors Pty Ltd
158 Melrose Drive
P: (062) 823 522 Fax: (062) 825 214

## Tas.

**BURNIE**
Motors Burnie
Marine Terrace
P: (03) 6431 1122 Fax: (03) 6431 3146
**DEVONPORT**
Motors Devonport
Victoria Parade
P: (03) 6424 4033 Fax: (03) 6424 5249
**HOBART**
Motors Pty Ltd
179 MacQuarie Street
P: (03) 6220 1171 Fax: (03) 6223 8117

# HOLDEN DEALERS cont.

**KING ISLAND**
King Island Motors Pty Ltd
Netherby Road, Currie
P: (03) 6462 1155 Fax: (03) 6462 1500
**LAUNCESTON**
Motors Launceston
93~95 Elizabeth Street
P: (03) 6332 9101 Fax: (03) 6334 5245
**SMITHTON**
Motors Smithton
Cnr Nelson & Gibson Street
P: (03) 6452 1241 Fax: (03) 6452 3123
**ULVERSTONE**
Motors Ulverston
97~101 Reibey Street
P: (03) 6425 2277 Fax: (03) 6425 2610

## Vic. Metropolitan

**BERWICK**
Barry Bourke Holden
755 Princes Highway
P: (03) 9707 2222 Fax: (03) 9707 3091
**BUNDOORA**
Watson Holden
413 Grimshaw Street
P: (03) 9467 4677 Fax: (03) 9467 7661
**BURWOOD**
Penfold Holden
142 Burwood Highway
P: (03) 9268 1333 Fax: (03) 9268 1335
**CHELSEA**
Harrison Holden
370 Nepean Highway
P: (03) 9772 2233 Fax: (03) 9772 2190
**CHELTENHAM**
Booran Holden
1212 Nepean Highway
P: (03) 9584 3333 Fax: (03) 9584 4285
**DANDENONG**
Booran Holden
25 Lonsdale Street
P: (03) 9794 5455 Fax: (03) 9793 7001
**DONCASTER**
Doncaster Holden
636~640 Doncaster Road
P: (03) 9840 0188 Fax: (03) 9840 2587
**ELSTERNWICK**
Reg Hunt Holden
77 Nepean Highway
P: (03) 9528 2222 Fax: (03) 9528 1088
**ESSENDON**
Preston Motors (Essendon) P/L
205~211 Keilor Road
P: (03) 9374 2888 Fax: (03) 9379 6754
**FAWKNER**
Mantello Holden
1263 Sydney Road
P: (03) 9359 1333 Fax: (03) 9359 9334
**FERNTREE GULLY**
Ferntree Gully Holden
980 Burwood Highway
P: (03) 9758 2222 Fax: (03) 9758 3435
**FOOTSCRAY**
Alan Mance Holden
435 Barkly Street
P: (03) 9687 4222 Fax: (03) 9687 7529
**FRANKSTON**
Bay City Holden
140 Dandenong Road
P: (03) 9784 4444 Fax: (03) 9784 4419
**GEELONG**
R & B Smith Holden
510 Moorabool Street
P: (03) 5222 2888 Fax: (03) 5221 3114
**GEELONG**
Winter & Taylor (Sales) P/L
23 Cavendish Street
P: (03) 5222 1811 Fax: (03) 5221 1873
**GLENHUNTLY**
Booran Holden
1234 Glenhuntly Road
P: (03) 9571 9313 Fax: (03) 9571 8374
**GLEN WAVERLEY**
Geoff Brady Holden
565~577 Springvale Road
P: (03) 9550 5888 Fax: (03) 9550 5855
**HASTINGS**
Westernport Holden
2147 Flinders Road
P: (059) 791 503 Fax: (059) 793 845
**LILYDALE**
Heritage Holden
344 Main Street
P: (03) 9735 5566 Fax: (03) 9735 1040
**MELTON**
Alan Mance Holden
1 Holland Drive
(03) 9746 9666 Fax: (03) 9746 9555
**MORNINGTON**
John Collins Holden
976 Nepean Highway
P: (03) 5975 4433 Fax: (03) 5975 4720
**OAKLEIGH**
Garry & Warren Smith
1575 Dandenong Road
P: (03) 9568 6333 Fax: (03) 9568 5691
**PRESTON**
Ralph D'Silva Holden
573~603 High Street
P: (03) 9471 0500 Fax: (03) 9478 4210
**RINGWOOD**
Patterson Cheney Holden
45~57 Maroondah Highway
P: (03) 9262 6666 Fax: (03) 9870 1113
**SOUTH MELBOURNE**
South City Holden
380 City Road
P: (03) 9627 3333 Fax: (03) 9686 5836
**SOUTH YARRA**
PenfoldHolden
681 Chapel Street
P: (03) 9827 2272 Fax: (03) 9826 5328
**SUNSHINE**
Kevin Dennis Holden
272 Ballarat Road
P: (03) 9292 9292 Fax: (03) 9292 9200
**WERRIBEE**
Ballan Holden
56 Princes Highway
P: (03) 9741 2222 Fax: (03) 9742 3797
**WEST MELBOURNE**
Reg Hunt Holden
577 King Street
P: (03) 9329 6611 Fax: (03) 9329 1550

# HOLDEN DEALERS cont.

## Vic. Country

**ALEXANDRA**
GK & JH Radford
79 Greints Street
P: (03) 5722 1588 Fax: (03) 5722 1978
**ARARAT**
David Reid Motors
High Street
P: (03) 5352 4100 Fax: (03) 5352 4388
**BAIRNSDALE**
The Big Garage
199 Main Street
P: (03) 5152 4131 Fax: (03) 5152 5313
**BALLARAT**
Peter Amor Motors
209~211 Gillies Street
P: (03) 5339 9333 Fax: (03) 5339 9202
**BENALLA**
Arnott's Motors
88~90 Bridge Street
P: (03) 5762 2500 Fax: (03) 5762 1586
**BENDIGO**
Ron Poyser Holden
Cnr High & Myrtle Streets
P: (03) 5442 3999 Fax: (03) 5442 7766
**BIRCHIP**
R.L. & C.J. Bales
38 Cumming Avenue
P: (03) 5492 2543
**BOORT**
Jaron Motors
55 Godfrey Street
P: (034) 552 008 Fax: (034) 552 008
**CAMPERDOWN**
Camperdown Auto Parts
96 Manifold Street
P: (03) 5593 1983 Fax: (03) 5593 1979
**CASTERTON**
Coxons Holden
139 Henty Street
P: (03) 5581 1166 Fax: (03) 5581 2116
**CHARLTON**
K.V. Charlton
70 High Street
P: (03) 5491 1444 Fax: (03) 5491 1984
**COBRAM**
Neville Mustica Motors
Murray Valley Hwy
P: (03) 5872 1666 Fax: (03) 5872 1920
**COHUNA**
Hare Motors Holden
105~107 King George Street
P: (03) 5456 4488 Fax: (03) 5456 3039
**COLAC**
Parker Bros. Motor Co
224 Murray Street
P: (03) 5231 5533 Fax: (03) 5231 3853
**DAYLESFORD**
K.R. Little
Vincent Street
P: (03) 5348 2248
**DIMBOOLA**
Westerfield Motors Pty Ltd
64 Lloyd Street
P: (03) 5389 1302
**DONALD**
O.A. Shilton & Sons Pty Ltd
5 Wood Street
P: (03) 5497 1400 Fax: (03) 5497 1505
**ECHUCA**
Echuca Motors
1 Nothern Highway
P: (03) 5482 1522 Fax: (03) 5480 6215
**EUROA**
Croxford Holden
41 Clifton Street
P: (03) 5795 2702 Fax: (03) 5795 3622
**FOSTER**
Ray Dower Motors
78 Main Street
P: (03) 5682 2404
**HAMILTON**
Peter Sandow Motors Pty Ltd
261 Gray Street
P: (03) 5572 1433 Fax: (03) 5571 1182
**HOPETOUN**
Hopetoun Motors
78 Lascelles Street
P: (03) 5083 3143 Fax: (03) 5083 3290
**HORSHAM**
Ivan Morrow Motors Pty Ltd
22 O'Callaghans Street
P: (03) 5382 0185 Fax: (03) 5382 0459
**KANIVA**
Kaniva Motors
82 Commercial Street
P: (03) 5392 2300 Fax: (03) 5392 2589
**KOOWEERUP**
G & J Light Mechanical repairs P/L
Station Road
P: (03) 5997 1325
**KORUMBURRA**
Peter Dunlevie Holden
42 Commercial Street
P: (03) 5655 1288 Fax: (03) 5655 1839
**KYABRAM**
D'Alberto Holden
60 McEwen Road
P: (03) 5852 1366 Fax: (03) 5852 1337
**KYNETON**
Mollison Motors Pty Ltd
167 Mollison Street
P: (03) 5422 1810 Fax: (03) 5422 3501
**LEONGATHA**
Gleeson Holden
37~43 Bair Street
P: (03) 5662 2361 Fax: (03) 5662 3393
**MANSFIELD**
Martin's Garage
52~54 Chenery Street
P: (03) 5775 2610 Fax: (03) 5775 1179
**MARYBOROUGH**
Graham Jacka Holden
35 Nolan Street
P: (03) 5461 1011 Fax: (03) 5461 4789
**MILDURA**
Stuart & Harrison (Sales) Pty Ltd
24~32 Deakin Avenue
P: (03) 5023 0051 Fax: (03) 5021 3076
**MORTLAKE**
W. Christian (Mortlake) Pty Ltd
107 Dunlop Street
P: (03) 5599 2301 Fax: (03) 5599 2567
**MURRAYVILLE**
Peers Motors
McKenzie Street
P: (03) 5095 2081 Fax: (03) 5095 2054

# HOLDEN DEALERS cont.

**NATHALIA**
BHB Motors
6 Blake Street
P: (03) 5866 2660
**NHILL**
Ivan Morrow Motors Pty Ltd
71~73 Nelson Street
P: (03) 5391 1333 Fax: (03) 5391 1228
**NULLAWIL**
Nullawil Motors & General Engineers
Calder Highway
P: (03) 5493 5210 Fax: (03) 5493 5210
**ORBOST**
Merlin Motors
Stanley Street
P: (03) 5154 1909
**PORTLAND**
Reynolds Holden
Henty Highway
P: (03) 5523 1688 Fax: (03) 5523 6299
**QUAMBATOOK**
Quambatook Auto Services
32 Gutherie Street
P: (03) 5457 1237 Fax: (03) 5457 1420
**ROCHESTER**
Bruce Hocking Motors Pty Ltd
71 Moore Street
P: (03) 5484 1455 Fax: (03) 5484 1140
**ROBINVALE**
Stuart & Harrison (Sales) Pty Ltd
cnr Herbert & George Sts
P: (03) 5026 3305
**RUTHERGLEN**
Jasper Bros Pty Ltd
62 Main Street
P: (03) 6032 8408 Fax: (03) 6032 8156
**SALE**
Keith Boyd Holden
273 York Street
P: (03) 5144 3944 Fax: (03) 5144 6289
**SEALAKE**
Paddy Smith Holden
Calder Highway
P: (03) 5070 1147
**SEYMOUR**
Neil Beer Holden
49 Emily Street
P: (03) 5792 2777 Fax: (03) 5792 4111
**SHEPPARTON**
Parker Bros. Auto Co.
Benalla Road
P: (03) 5822 2666 Fax: (03) 5831 2507
**STAWELL**
Howden Holden
72~76 Longfield Street
P: (03) 5358 1888 Fax: (03) 5358 3954
**SWAN HILL**
Swan Hill Holden
94~102 Campbell Street
P: (03) 5033 1800 Fax: (03) 5032 2468
**TALLANGATTA**
Crispin Motors
21 Towong Street
P: (060) 712 414 Fax: (060) 712 655
**TIMBOON**
Timboon Motors
Bailey Street
P: (03) 5598 3007 Fax: (03) 5598 3362
**TRARALGON**
Colin Watson Holden
Princes Highway
P: (03) 5174 8000 Fax: (03) 5175 0050
**UNDERBOOL**
A.J. Gloster & Sons
Cotter Street
P: (03) 5094 6291 Fax: (03) 5094 6297
**WANGARATTA**
Alan Capp (New Cars) Pty Ltd
Tone Road
P: (03) 5721 2133 Fax: (03) 5721 4626
**WARRACKNABEAL**
Amor Motors Aubrey Truck Sales
33 Woolcock Street
P: (03) 5394 1055 Fax: (03) 5398 1904
**WARRAGUL**
Vin Rowe Holden
3 Endeavour Street
P: (03) 5623 1362 Fax: (03) 5623 4314
**WARRNAMBOOL**
Callaghan Motors Pty Ltd
133~137 Fairy Street
P: (03) 5562 3711 Fax: (03) 5562 7415
**WODONGA**
McRae White Motors
182 Melbourne Road
P: (060) 562 333 Fax: (060) 247 899
**WONTHAGGI**
J.P. Holden
2 Murray Street
P: (03) 5672 1122 Fax: (03) 5672 4141
**YARRAM**
John Palmer Holden
150 Commercial Road
P: (03) 5182 5122 Fax: (03) 5182 6166
**YARRAWONGA**
Pigdons Pty Ltd
Belmore Street
P: (03) 5743 1577 Fax: (03) 5744 1788

## Qld. Metropolitan

**ALBION**
Bill Harrison Car Sales
Frodsham Street & Crosby Road
P: (07) 262 2455 Fax: (07) 262 5728
**ASPLEY**
Zupps Aspley Pty Ltd
1454 Gympie Road
P: (07) 3246 8000 Fax: (07) 3263 7036
**CAPALABA**
Oldfield Holden
103 Redland Bay Road
P: (07) 3245 2200 Fax: (07) 3245 2221
**INDOOROOPILLY**
Westpoint Holden
440 Moggill Road
P: (07) 3378 6622 Fax: (07) 3878 1340
**IPSWICH**
Ross Llewellyn Holden
246 Brisbane Road
P: (07) 3282 2922 Fax: (07) 3282 6359
**MOOROOKA**
John Sivyer Holden
1060 Ipswich Road
P: (07) 3892 3344 Fax: (07) 3848 7816

# HOLDEN DEALERS cont.

**MT. GRAVATT**
Zupps Motors Pty Ltd
1310 Logan Road
P: (07) 3877 0000 Fax: (07) 3877 0130
**NEWSTEAD**
Eagers Retail Pty Ltd
95 Breakfast Creek Road
P: (07) 3364 1199 Fax: (07) 3364 1099
**PETRIE**
Petrie Holden
1059 Gympie Road
P: (07) 3285 2244 Fax: (07) 3285 1975
**REDCLIFFE**
Village Holden
425 Elizabeth Avenue
P: (07) 3284 7344 Fax: (07) 3883 2711
**SPRINGWOOD**
Motorama Holden
3455 Pacific Highway
P: (07) 3208 8888 Fax: (07) 3208 7018
**WINDSOR**
Leach Holden
143 Newmarket Road
P: (07) 3357 6711 Fax: (07) 3357 5403
**WOOLLOONGABBA**
Armstrong Holden
73 Ipswich Road
P: (07) 3891 5522 Fax: (07) 3891 5146
**WYNNUM**
Doug Barton Holden
200 Tingal Road
P: (07) 3396 7777 Fax: (07) 3393 3593

## Qld. Country

**ATHERTON**
Redding Motors Pty Ltd
2 Cook Street
P: (070) 911 344 Fax: (070) 912 039
**AYR**
Honeycombes Sales & Service
213~217 Queen Street
P: (077) 832 344 Fax: (077) 832 079
**BEAUDESERT**
Lawson Holden
57 Brisbane Street
P: (075) 541 2000 Fax: (075) 541 3368
**BOWEN**
McDermott Holden
98 Herbert Street
P: (077) 861 430 Fax: (077) 862 903
**BUNDABERG**
Ross Gray Holden
Takalvan Street
P: (071) 521 666 Fax: (071) 515 788
**CABOOLTURE**
Beecham Holden
Bribie Island Road
P: (07) 5495 1477 Fax: (07) 5495 2839
**CAIRNS**
Ireland Holden
227~233 Mulgrave Road
P: (070) 523 666 Fax: (070) 523 606
**CALOUNDRA**
Caloundra City Holden
Caloundra Road
P: (07) 5491 5522 Fax: (07) 5491 8016
**CHARLEVILLE**
Alan Dobbin Holden
129 Alfred Street
P: (076) 541 737 Fax: (076) 543 254
**CHARTERS TOWERS**
Peters Holden
57 Mosman Street
P: (077) 871 177 Fax: (077) 874 858
**CHINCHILLA**
Ainsworth Motors & Machinery Pty Ltd
55 Chinchilla Street
P: (076) 627 286 Fax: (076) 627 197
**CROWS NEST**
Dennis Nissen Motors
14 William Street
P: (076) 981 300 Fax: (076) 981 495
**DALBY**
Johnson's Holden
36 Drayton Street
P: (076) 622 422 Fax: (076) 624 311
**EMERALD**
Orion Agriculture Supplies Pty Ltd
Clermont Street
P: (079) 821 355 Fax: (079) 807 622
**GATTON**
Gatton Auto Centre
67 Railway Street
P: (07) 5462 1633 Fax: (07) 5462 1980
**GLADSTONE**
Andersons Auto City
56 Yarroon Street
P: (079) 721 177 Fax: (079) 729 141
**GYMPIE**
Madills
35 Mellor Street
P: (07) 5482 2522 Fax: (07) 5482 2672
**HERVEY BAY**
Whitaker Motor World
96 Torqyay Road
P: (071) 281 722
**INGHAM**
Devietti Holden
99 Lannercost Street
P: (077) 761 599 Fax: (077) 763 547
**INNISFAIL**
I.C. Taylor Pty Ltd
117 Edith Street
P: (070) 611 577 Fax: (070) 613 963
**JULIA CREEK**
Julia Creek Motors Pty Ltd
Burke Street
P: (077) 467 155 Fax: (077) 467 197
**KILCOY**
Hobart's Garage
58 Mary Street
P: (07) 5497 1204 Fax: (07) 5497 1204
**KINGAROY**
John Dundas Pty Ltd
38 King Street
P: (071) 621 722 Fax: (071) 623 756
**LAIDLEY**
Buhse's Garage Pty Ltd
5 Spicer Street
P: (07) 5465 1406 Fax: (07) 5465 1706
**LONGREACH**
Longreach Motors
33 Swan Street
P: (076) 581 700 Fax: (076) 581 857

# HOLDEN DEALERS cont.

**MACKAY**
Pioneer Holden
Cnr Gordon & Wellington Streets
P: (079) 572 771 Fax: (079) 513 591
**MAROOCHYDORE**
Sunco Holden
Wises Road
P: (07) 5443 7644 Fax: (07) 5443 7645
**MARYBOROUGH**
Whitaker Holden
109~111 March Street
P: (071) 222 255 Fax: (071) 231 912
**MOUNT ISA**
Barkly Motors Pty Ltd
Marian Street
P: (077) 433 044 Fax: (077) 438 466
**MURGON**
Clifton Motors
McAllister Street
P: (071) 681 066 Fax: (071) 681 947
**NAMBOUR**
Kallenbach Motors
139 Howard Street
P: (074) 413 099 Fax: (074) 413 105
**NANANGO**
Nanango Motors Pty Ltd
72~74 Drayton Street
P: (071) 631 108 Fax: (071) 631 108
**NOOSAVILLE**
Madill's Noosa
Cnr Weyba Road and Mary Street
P: (074) 498 399 Fax: (074) 490 828
**PROSERPINE**
Crossley Car Sales Whitsunday Pty Ltd
162~164 Main Street
P: (079) 451 822 Fax: (079) 452 022
**QUILPIE**
Quality Motors
Boonkai Street
P: (076) 561 244 Fax: (076) 561 322
**ROBINA**
Smith's Robina Holden
16 Brabham Circuit
P: (07) 5575 0500 Fax: (07) 5562 1072
**ROCKHAMPTON**
Lawrence's
327 Richardson Road
P: (079) 305 111 Fax: (079) 305 112
**ROMA**
Maranoa Multi Agencies
Bowen Street
P: (076) 222 900 Fax: (076) 221 832
**SOUTHPORT**
Lockhart Holden
Cnr Nerang Road & Olsen Avenue
P: (07) 5597 2900 Fax: (07) 5597 2542
**SPRINGSURE**
Springsure Motors
Eclipse Street
P: (079) 841 177 Fax: (079) 841 361
**ST. GEORGE**
Halpin Motors
39~41 Grey Street
P: (076) 255 466 Fax: (076) 255 855
**STANTHORPE**
Central Motors
42 Maryland Street
P: (076) 812 200 Fax: (076) 811 479
**TOOWOOMBA**
Toowoomba Holden
Cnr James & Hume Streets
P: (076) 900 900 Fax: (076) 900 909
**TOWNSVILLE**
Tony Ireland Holden
87~91 Charters Towers Road
P: (077) 267 777 Fax: (077) 211 486
**TULLY**
Island Coast Holden
12 Richardson Street
P: (070) 681 288 Fax: (070) 682 145
**WARWICK**
Deighton Motors Pty Ltd
Grafton Street
P: (076) 612 266 Fax: (076) 611 275

## N.T.

**ALICE SPRINGS**
Kittles Holden
Cnr Wills & Railway Terrace
P: (08) 8952 1155 Fax: (08) 8953 1556
**DARWIN**
Kerry Holden
21~25 Stuart Highway
P: (089) 8981 8000 Fax: (089) 8981 7607

## S.A. Metropolitan

**ADELAIDE**
City Holden
223 Grenfell Street
P: (08) 8223 7666 Fax: (08) 232 0718
**ELIZABETH**
Peter Page Holden
Elizabeth Way
P: (08) 8255 1288 Fax: (08) 8255 9260
**MALVERN**
Claridge Holden
361~367 Unley Road
P: (08) 8272 1600 Fax: (08) 8373 0057
**PORT ADELAIDE**
Smiths of Port Adelaide
271 Commercial Road
P: (08) 8447 3855 Fax: (08) 84473 978
**REYNELLA**
Southgate Holden
49~59 Main South Road
P: (08) 8381 9555 Fax: (08) 8381 6274
**SOMERTON PARK**
Hamilton Holden
278~288 Brighton Road
P: (08) 8296 4866 Fax: (08) 8296 7112
**THEBARTON**
Metro Holden
1 Port Road
P: (08) 8354 9555 Fax: (08) 8443 6855
**VALLEY VIEW**
Plaza Holden
817~839 North East Road
P: (08) 8263 4922 Fax: (08) 8265 5200

## S.A. Country

**BALAKLAVA**
Balaklava Motors
4 Wallace Street
P: (08) 8862 1030 Fax: (08) 8862 1030

# HOLDEN DEALERS cont.

**BERRI**
Rosenthal Bros Pty Ltd
Vaughan Terrace
P: (08) 8582 3644 Fax: (08) 8582 3515

**BORDERTOWN**
Farmer's Centre
South Terrace
P: (087) 520 266

**CEDUNA**
Beck Motors Pty Ltd
Poynton Street
P: (08) 8625 2616 Fax: (08) 8625 3201

**CLARE**
Mid North Motor Company
7 Old North Road
P: (08) 8842 2200 Fax: (08) 8842 2886

**CLEVE**
Herbert Motors Pty Ltd
Rudall Road
P: (08) 8628 2150 Fax: (08) 8628 2537

**CUMMINS**
Trigg & Wedd
3 Umlauf Street
P: (086) 762 105 Fax: (086) 762 303

**CRYSTAL BROOK**
Crouch Rural Pty. Ltd
26 Brandis Street
P: (08) 8636 2257 Fax: (08) 8636 2088

**GAWLER**
Steinborner Holden
Cnr Murray & Bridge Sts
P: (08) 8522 4222 Fax: (08) 85) 8522 4898

**KADINA**
J.H. Rosewarne Pty Ltd
Graves Street
P: (08) 8821 1111 Fax: (08) 8821 1686

**KEITH**
Farmers Centre
McBain Street
P: (08) 8755 3222 Fax: (08) 8755 3211

**KINGSCOTE**
Roberts Motors
Telegraph Road
P: (084) 822 021 Fax: (084) 822 853

**KIMBA**
R.J. Flavel Mechanical Repairs
30 High Street
P: (086) 272 555 Fax: (086) 272 044

**KINGSTON**
Lecornu's Service Garage
Agnes Street
P: (08) 8767 2424 Fax: (08) 8767 2533

**LOXTON**
Flight Motors Pty Ltd
Bookpurnong Terrace
P: (08) 8584 7277 Fax: (08) 8584 5937

**MAITLAND**
Maitland Motors Pty Ltd
58 Robert Street
P: (08) 8832 2601 Fax: (08) 8832 2673

**MALLALA**
Curnow's Garage Pty Ltd
Balaklava Road
P: (08) 8527 2003 Fax: (08) 8527 2255

**MENINGIE**
Peter Hood Holden
Cnr Princes Highway & Coonalpyn Road
P: (08) 8575 1109 Fax: (08) 8575 1537

**MILLICENT**
Dennis Cowling Holden
98 George Street
P: (08) 8733 3488 Fax: (08) 8733 3112

**MT. BARKER**
Gilbert Motors
57 Adelaide Road
P: (08) 8391 1500 Fax: (08) 8398 2124

**MT. GAMBIER**
O.G. Roberts & Co
Jubilee Highway West
P: (08) 8725 6788 Fax: (08) 8723 0636

**MURRAY BRIDGE**
Dutton Motors Pty Ltd
7 Adelaide Road
P: (08) 8532 1999 Fax: (08) 8531 0599

**NARACOORTE**
Kingcraig Motors Pty Ltd
158~164 Smith Street
P: (08) 8762 1555 Fax: (08) 8762 1806

**PORT AUGUSTA**
Hayes Augusta Motor Company
38 Stirling Road
P: (08) 8641 0488 Fax: (08) 8642 4300

**PORT LINCOLN**
City Motors
King Street
P: (08) 8682 1100 Fax: (08) 8682 4734

**PORT PIRIE**
Spencer Holden
50 Ellen Street
P: (08) 8632 3888 Fax: (08) 8632 6405

**RENMARK**
Rosenthal Motors Pty Ltd
Ral Ral Avenue
P: (08) 8586 6626 Fax: (08) 8586 4040

**ROXBYDOWNS**
Augusta Motor Co.
10 Gosse Street
P: (086) 710 100 Fax: (086) 710 950

**STRATHALBYN**
Gilbert Holden Strathalbyn
High Street
P: (08) 8536 2066 Fax: (08) 8536 2672

**TANUNDA**
Hage & Co Pty Ltd
50 Murray Street
P: (08) 8563 2123 Fax: (08) 8563 3488

**VICTOR HARBOR**
Southern Motors Holden
5 Victoria Street
P: (08) 8552 1255 Fax: (08) 8555 2788

**WAIKERIE**
Riverside Holden
6 Crush Terrace
P: (08) 8541 2900 Fax: (08) 8541 3325

**WHYALLA**
Whyalla Motor Company
64 Essington Lewis Avenue
P: (08) 8645 7388 Fax: (08) 8645 5512

**YANKALILLA**
Martin Motors Pty Ltd
Main Street
P: (08) 8558 2052 Fax: (08) 8558 2911

**YORKETOWN**
Southway Holden
7 Minalaton Road
P: (08) 8852 1322 Fax: (08) 8852 1271

# HOLDEN DEALERS cont.

## W.A. Metropolitan

**CANNINGTON**
Brian Gardner Holden
1308~1324 Albany Hwy
P: (08) 9451 2333 Fax: (08) 9458 9144
**FREMANTLE**
Shacks Holden
64 Queen Victoria Street
P: (08) 9432 9400 Fax: (08) 9432 9456
**GOSNELLS**
Lance Gibbons Holden
2325 Albany Highway
P: (08) 9398 2211 Fax: (08) 9398 5683
**MANDURAH**
Mandurah Holden
283 Pinjarra Rd
P: (08) 9535 8777 Fax: (08) 9535 8822
**MELVILLE**
Melville Motors Pty Ltd
532~540 Canning Highway
P: (08) 9333 5333 Fax: (08) 9333 5300
**MIDLAND**
Goldy Holden
161 Great Eastern Highway
P: (08) 9274 3411 Fax: (08) 9274 6042
**MORLEY**
Metro Motors
212 Walter Road
P: (08) 9449 3522 Fax: (08) 9449 3599
**NAVAL BASE**
Shacks Cockburn
15 Rockingham Road
P: (08) 9410 1433 Fax: (08) 9410 2331
**OSBORNE PARK**
North City Holden
Cnr Scarborough Beach Rd & Harborne St
P: (08) 9273 2222 Fax: (08) 9273 2220
**PERTH**
City Motors
505 Newcastle Street
P: (08) 9422 7777 Fax: (08) 9422 7630
**VICTORIA PARK**
Youngs Holden
529 Albany Highway
P: (08) 9449 9449 Fax: (08) 9449 9494
**WANNEROO**
Phoenix Holden
5 Berriman Drive
P: (08) 9409 9200 Fax: (08) 9309 2140

## W.A. Country

**ALBANY**
Mark Loveridge Holden
92~98 Earl Street
P: (08) 9841 2355 Fax: (08) 9841 8623
**BRIDGETOWN**
Kordics Bridgetown
Hampton Street
P: (08) 9761 1377 Fax: (08) 9761 2151
**BROOKTON**
Coote Motors
Robinson Road
P: (08) 9642 1108 Fax: (08) 9642 1003
**BROOME**
Norwest Holden
McPherson Street
P: (08) 9192 1277 Fax: (08) 9192 2230
**BUNBURY**
Bunbury Holden
3 Sandridge Road
P: (08) 9791 3899 Fax: (08) 9791 2990
**BUSSELTON**
Fennessy Holden
2~4 Bussell Hwy
P: (08) 9752 1577 Fax: (08) 9752 4080
**CARNAMAH**
T & H Walton Stores Pty Ltd
Robertson Street
P: (08) 9951 1130 Fax: (08) 9951 1082
**CARNARVON**
North West Autos
175 Robinson Street
P: (08) 9941 1159 Fax: (08) 9941 1363
**COLLIE**
Station Motors
102 Throssell Street
P: (08) 9734 1855 Fax: (08) 9734 1913
**CORRIGIN**
Farmpower
Kunjin Street
P:(08) 9063 2303 Fax: (08) 9063 2445
**CRANBROOK**
Cranbrook Motors
11~13 Gathorne Street
P: (08) 9826 1014 Fax: (08) 9826 1097
**DERBY**
BP Colac
Loch Street
P: (08) 9191 1429
**ESPERANCE**
Dempster Holden
Norseman Road
P: (08) 9071 1155 Fax: (08) 9071 3799
**GERALDTON**
Youngs Motors
Cathedral Avenue
P: (08) 9921 1088 Fax: (08) 9964 1157
**GNOWANGERUP**
G.S. Hendry & Co Pty Ltd
Yougenup Street
P: (08) 9827 1030 Fax: (08) 9827 1460
**HARVEY**
Stockman Holden
111 Uduc Road
P: (08) 9729 3333 Fax: (08) 9729 3221
**KALGOORLIE**
Golden City Holden
114 Boulder Road
P: (08) 9021 1699 Fax: (08) 9021 5737
**KARRATHA**
Moxham Motors
Lot 4551 Balmoral Road
P: (08) 9144 1225 Fax: (08) 9144 1258
**KATANNING**
Edwards Holden
159 Clive Street
P: (08) 9821 2388 Fax: (08) 9821 2429
**KELLERBERRIN**
Dowding Motors
1 Mitchell Street
P: (08) 9045 4141 Fax: (08) 9045 4466
**KOJONUP**
Harris' Garage
Albany Highway
P: (08) 9831 1122 Fax (08) 9831 1043

## HOLDEN DEALERS cont.

**KULIN**
Farmpower
I ligh Street
P: (08) 9880 1266 Fax: (08) 9808 1281
**KUNUNURRA**
Elgee Holden
231 Bloodwood Drive
P: (08) 9168 2236 Fax: (08) 9169 1124
**MANJIMUP**
Manjimup Automotive Services
Pritchard Street
P: (08) 9771 1388 Fax: (08) 9777 1214
**MERREDIN**
Carson's of Merredin
112 Barrack Street
P: (08) 9041 1444 Fax: (08) 9041 1765
**MOORA**
Frank Lewis Holden
Gardiner Street
P: (08) 9651 1408 Fax: (08) 9651 1724
**NAREMBEEN**
Aquip Holden
20 Churchill Avenue
P: (08) 9064 7214 Fax: (08) 9064 7065
**NARROGIN**
Marley White & Co
Federal Street
P: (08) 9881 4777 Fax: (08) 9881 4707
**NEWMAN**
Cockburn Corefleet
Newman Drive
P: (08) 9175 1421
**NORTHAM**
Withnell Motors
58 Fitzgerald Street
P: (08) 9622 1188 Fax: (08) 9622 3664
**PORT HEDLAND**
15 Anderson Street
Moxham Motors
P:(08) 9173 3660 Fax: (08) 9173 3662
**QUAIRADING**
Farmpower
York Road
P: (08) 9645 1103 Fax: (08) 9645 1310
**TOM PRICE**
Farnor Motors Pty. Ltd.
43 Booneroo Road
P: (08) 9189 1400
**WAGIN**
Marley White & Co
Tudor Street
P: (08) 9861 1055 Fax: (08) 9861 1657
**WEDGEFIELD**
N & L Mechnical
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CHAPTER 10

# Tow and load

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10-2 Towing
10-2 Towing equipment
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10-5 Towing and loading equipment
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# TOWING

Your vehicle is designed primarily as a passenger car, so handling, durability and economy may be affected by towing a caravan or trailer.

Refer to the chart below to see which equipment is specified as essential and which equipment is recommended for the weight you are towing. Your Holden Dealer will help supply and install towing equipment to suit your requirements. Note that regulations covering the maximum towing capacity varies from State to State.

Never exceed the loads given for the towing equipment fitted to your vehicle. For your safety and your vehicle's durability, all essential equipment must be fitted. Otherwise you may void your New Vehicle Warranty, to the extent that Holden considers the overloading or missing equipment to have affected the specifications or quality of your vehicle.

## Driving speed

When towing up to 1,600 kg maximum driving speed is as per the State's Law.

When towing between 1,600 kg and 2,100 kg maximum driving speed must not exceed 80 km/h.

**CAUTION:** Holden towing equipment is recommended where it is available. Where it is not available, no recommendation is made as to the make of equipment which should be used. Holden will not accept liability for defects occurring in towing equipment not marketed by Holden or for defects in the vehicle arising from the use of such equipment. The use of such equipment may void your New Vehicle Warranty, to the extent that Holden considers the non-recommended equipment affects the specifications or quality of your Holden vehicle. It is inadvisable to mix and match different brands of towing equipment, as equipment is usually designed as an integrated package.

## Towing Equipment

| | | |
|---|---|---|
| **Up to 1200 kg** | Essential | Holden 2,500 kg rated tow bar |
| | Essential | Holden trailer wiring harness |
| | Recommended | Load equalising hitch |
| | Recommended | Brakes on the trailer if loaded trailer weighs more than 750 kg |
| **Between 1201 kg and 2100 kg** | Essential | Holden 2,500 kg rating tow bar |
| | Essential | Holden trailer wiring harness |
| | Essential | Load equalising hitch |
| | Essential | Brakes on the trailer |

Jackaroo towing packages include the tow bar, tongue and wiring harness. An equaliser hitch is sold separately.

# LOADING THE VEHICLE

Overloading is a safety hazard and could also shorten the life of your vehicle.

Do not exceed the maximum axle loads or the maximum G.C.M., considering the weight of any fitted Holden approved accessories.

If unsure, the vehicle should be weighed at a weighbridge. Remember that weight on a roof rack does not increase the load carrying capacity of the vehicle.

## Maximum front and rear axle loads

The maximum rear axle load for your vehicle is 1,140 kg. The maximum front axle load for your vehicle is 1,250 kg.

## Maximum G.C.M. (Gross Combined Mass)

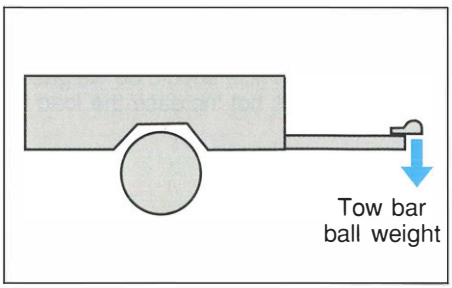
G.C.M. is the maximum allowable combined weight of the vehicle (with passengers, luggage and a full tank of fuel) and the loaded trailer.

The maximum allowable G.C.M. is 5,100 kg. Refer to the load equalising hitch instructions.

# ATTACHING A TRAILER

## Recommended procedure for attaching a trailer

If a caravan or trailer is hitched to the vehicle it places a weight on the tow bar. This weight is called the "tow bar ball weight".




It is recommended that the tow bar ball weight should be 10% of the packed trailer/caravan weight. This can be adjusted by correctly packing the contents of the trailer/caravan, i.e., by moving items forwards or backwards within the trailer/caravan so as to change the balance of the trailer/caravan.

If the tow bar ball weight is too light or too heavy, the steering and handling of the car will be affected.

## All towing

1. Axle loads must not be exceeded when the tow bar ball weight is included (refer previous page for maximum axle loads). If maximum axle loads are exceeded, sufficient weight should be removed from the rear of the vehicle and transferred onto the trailer.
2. Ensure the weight of the packed trailer is not greater than the towing capacity of your Holden approved tow bar package.
3. Connect the trailer to the vehicle.

## When the tow bar ball weight exceeds 120 kg

4. Adjust load distribution hitch so that the car and trailer are level with the ground.

# TOWING and LOADING EQUIPMENT

## Load equalising hitch

A load equalising hitch is recommended when the tow bar ball weight is more than 120kg.

A load equalising hitch is designed to raise the rear of the vehicle and transfer a portion of the load to the front wheels and the trailer wheels when the loaded trailer/caravan is hitched.

The loaded vehicle and trailer should be level to the ground.

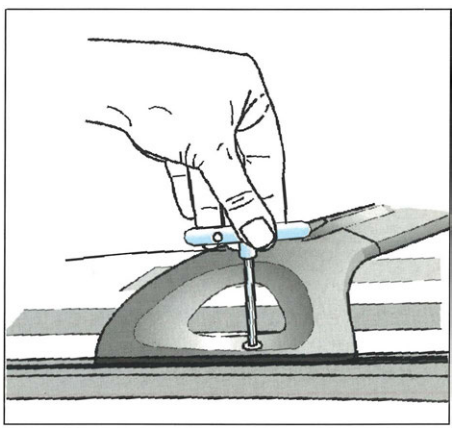
## Roof rack loads

Roof rack loads alter the handling of a vehicle, due to a change in the centre of gravity. When carrying loads on the roof rack, avoid abrupt swerving or sharp steering. The load, which should not exceed 50 kg should be evenly distributed.

The crossbars on the roof rack can be adjusted using a special key.

To adjust, loosen the screws at both ends of the crossbar with the key. Move the crossbar backwards or forwards as required, then tighten the screws with the key.

Remember that weight on a roof rack does not increase the load carrying capacity of the vehicle.



## Running-in when towing

It is recommended that you drive your new vehicle at least 1,500 km before towing. If you must tow before this, do not exceed 80 km/h. The same applies if you have a new or reconditioned engine, transmission or rear axle.

## TOWING PRECAUTIONS

- When towing, your tyres should be inflated to the maximum recommended pressure. Refer to the vehicle's tyre placard, located on the driver's door opening.
- Ensure that a load equalising hitch is correctly distributing the ball load.
- Tighten the tow ball retaining nut to 175 Nm and check the torque frequently.
- Your vehicle will handle differently when towing. It's a good idea to make a couple of short distance trips with the caravan or trailer before you set off on a longer journey.
- Have your vehicle correctly maintained and serviced.
- Have your caravan or trailer maintained and serviced, with particular attention given to condition of brakes, tyres, suspension, wheel bearings, towing coupling and lighting.
- Headlights may need re-aiming after the loaded caravan has been hitched, particularly if a load equalising hitch is not used.
- Use a lower gear, rather than your brakes, when descending steep hills.
- If your caravan or trailer moves off the road behind you, allow the left wheels of your vehicle to move off as well. When it is safe to do so, carefully steer back on to the road. A sudden attempt to steer back could make you swerve dangerously.
- *Automatic transmission:* To stop the transmission constantly changing between 3rd and 4th gear, it is recommended that the "Power" mode be selected when towing. Refer page 4-7 for selection of "Power" or "Normal" modes.
- Do not use axle-mounted hitches. They can cause damage to the axle housing, wheel bearings, wheels and tyres.
- TRAILER BRAKES:

  Trailer brakes are recommended on trailers weighing 750 kg when loaded. Some States require trailer brakes on loads less than 750 kg and you should check your State's requirements.

  The brakes on the trailer or caravan must be designed to cope with the braking requirements of that trailer or caravan under all towing conditions, without adversely affecting the brakes on the vehicle.

CHAPTER 11

# Cleaning

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11-2 Exterior cleaning

11-4 Interior cleaning

# EXTERIOR CLEANING

## Washing

The best way to preserve your vehicle's finish is to keep it clean by frequent washing. Wash the vehicle in lukewarm or cold water.

Do not use hot water or wash in the direct rays of the sun. Do not use strong soap or chemical detergents. All cleaning agents should be promptly flushed from the surface and not allowed to dry on the finish.

## Polishing and waxing

Polishing is recommended to remove accumulated residue and eliminate any `weathered' appearance.

Your Holden Dealer offers several polishes and cleaners which have proven value in maintaining original finish appearance and durability.

## Bright metal parts

Bright metal parts should be cleaned regularly to keep their lustre. Washing with water is all that is usually needed. However, chrome polish may be used on CHROME or STAINLESS STEEL trim, if necessary. A coating of wax, rubbed to a high polish, is recommended for all bright metal parts.

## Aluminium wheels

Aluminium wheels have a clear finish similar to paint. Use a chamois, sponge or other soft material when washing the wheels.

## Foreign material deposits

Road oil, tar, sap, salt, bird droppings, chemicals from industrial chimneys and other foreign matter may damage vehicle finishes if allowed to remain on painted surfaces.

Prompt washing may not completely remove all of these deposits. When using chemical cleaners developed for this purpose be certain they are safe for use on painted surfaces.

## Finish damage

Any stone chips, fractures or deep scratches in the finish should be repaired promptly. Exposed metal will corrode quickly and may develop into a major repair expense. Minor chips and scratches can be repaired using touch-up materials available from your Holden Dealer.

# EXTERIOR CLEANING

## Corrosion protection

Generally, your vehicle has been designed and built to resist corrosion. Special materials and protective finishes were applied to most parts of your vehicle when it was built to help maintain good looks, strength and reliable operation. However, some parts which are normally not visible (such as certain parts under the vehicle and under the hood) are strong enough so that surface rust will not affect their reliability. So corrosion protection is not needed or used on these parts. By omitting unneeded rust protection on such parts and applying extra protection where it is needed most, the best value is assured for the buyer.

## Sheet metal damage

If your vehicle is damaged and required sheet metal repair or replacement, make sure the body repair shop applies anti-corrosion material to the parts repaired or replaced so that corrosion protection is restored.

## Underbody maintenance

It is recommended to flush the underbody with plain water at least once a year. Take care to clean any areas well where mud and other debris can collect. Sediment packed in closed areas of the frame should be loosened before being flushed.

## Wiper blade cleaning

Much of the road scum thrown up onto the windscreen glass (causes smearing when the wipers are switched on) transfers onto the wiper blades. Many owners, whilst they methodically clean the windscreen glass, omit to clean the wiper blades and consequently smearing of the glass reappears immediately the wiper blades are set in motion. The blades can be cleaned by simply lifting them off the windscreen glass and then using warm water and a recognised washing fluid.

IMPORTANT: Do not operate the wipers blades by hand as this may damage the wiper drive mechanism.

Should the wiper blades be frozen to the windscreen, it is imperative that they be lifted off and freed by hand before switching on the wipers.

# *INTERIOR CLEANING*

Some cleaners may be poisonous or flammable and their improper use may cause personal injury or damage the inside of the vehicle. Therefore, when cleaning the inside of the vehicle, DO NOT USE volatile cleaning solvents such as: acetone, lacquer thinners, enamel reducers, nail polish removers; or such cleaning materials as laundry soaps, bleaches or reducing agents except as noted in the fabric cleaning advice on stain removal that follows. NEVER use carbon tetrachloride, gasoline, benzene or naphtha for any cleaning purpose.

Overexposure to these vapours may result in a health problem. This is even more likely to occur in small, un-ventilated spaces. It is recommended that all vehicle doors be opened for ventilation when any cleaning agents or other chemicals are used in the interior. Approved respiratory protection equipment may be needed. Follow the manufacturer's advice whenever cleaning agents or other chemicals are used, inside or outside the vehicle.

To avoid possible permanent discoloration of white or light coloured seats, DO NOT let materials with unstable dyes come in contact with seat trim materials until the trim materials are completely dry (this would include certain types of casual clothing, such as coloured denims, corduroys, leathers and suedes, decorative paper, etc.).

With the use of modern trim materials it is VERY IMPORTANT that proper cleaning techniques and cleaners be used. Failure to do this on the first cleaning may result in water spots, spot rings or setting of stains, all of which make it more difficult to remove on a second cleaning.

The portions of the following cleaning instructions that re in bold face are especially important and MUST be followed. Dust and loose dirt that accumulate on interior fabrics should be removed often with a vacuum cleaner or soft brush. Vinyl or leather trim should be wiped regularly with a clean damp cloth. Normal trim soil, spots or stains can be cleaned with conventional cleaners:

**Remember these three basic steps before cleaning:**

1. Remove stains as quickly as possible before they become `set'.
2. Use a clean cloth or sponge and change to a clean area often. A soft brush may be used if stains persist.
3. Use solvent type cleaners only in a well ventilated area. Do not saturate the stained area.
4. If a ring forms after spot cleaning, clean the entire area IMMEDIATELY.
5. Follow specific instruction on cleaner labels.

# INTERIOR CLEANING cont.

## Spot cleaning with solvent cleaner

Before trying to remove a spot or stain from fabric, determine as accurately as you can when kind and how old the spot or stain is. Some spots or stains can be removed with water or mild soap solutions, refer `Removal of specific stains'. Spots or stains should always be removed as soon as possible.

Some types of marks, such as lipstick, inks and grease, are very difficult (sometimes impossible) to completely remove. When cleaning this type of stain be sure not to enlarge the soiled area. Fabric cleaner (solvent type) is excellent for spot cleaning grease, oil or fat.

- Gently scrape excess stain off trim material with a clean, DULL knife or scraper. USE VERY LITTLE CLEANER, light pressure and clean cloths (preferably cheesecloth). Cleaning should be from the outside of the stain "feathering" towards the centre. Keep changing to a clean section of cloth.
- When the stain is cleaned from the fabric, immediately dry the area with an air hose, hair dryer or heat lamp to help prevent a cleaning ring. Use caution with hair dryer or lamp to prevent damage to fabric.
- If a ring forms, immediately repeat the cleaning operation over a slightly larger area with emphasis on `feathering' towards its centre. If ring still remains, mask off surrounding trim sections and clean entire affected area with a multi-purpose powder cleaner (as described under `General soilage or water spots from fabric').

## Cleaning class surfaces

Glass surfaces should be cleaned regularly. Use of glass cleaner will remove normal tobacco smoke and dust films sometimes caused by ingredients used in vinyls and interior plastics. Never use abrasive cleaners on any vehicles glass as they may cause scratches.

## General soilage or water spots from fabric

Multipurpose powdered cleaner is excellent for this type of cleaning and for cleaning panel sections where small cleaning rings may be left from spot cleaning.

- Vacuum area thoroughly to remove loose dirt.
- ALWAYS clean a full trim assembly or complete trim section. Mask surrounding trim along stitch or welt lines.
- Mix multipurpose powdered cleaner in strict accordance with directions on the label of the container. Mix in proportion for smaller quantities.
- USE SUDS ONLY ON A CLEAN SPONGE OR SOFT BRISTLE BRUSH. DO NOT SATURATE FABRIC OR RUB HARSHLY WITH BRUSH.
- IMMEDIATELY AFTER CLEANING WIPE OFF EXCESS CLEANER WITH SLIGHTLY DAMP ABSORBENT TOWEL OR CLOTH.
- IMMEDIATELY AFTER WIPING, FORCE-DRY WITH AIR HOSE, HAIR DRYER OR HEAT LAMP. Use caution with hair dryer or lamp to prevent damage to fabric.
- When trim materials with a sheen or lustre finish are dry, wipe fabric lightly with a soft, dry, clean cloth to restore the sheen or lustre.

# INTERIOR CLEANING cont.

## Specific stains

### Grease or oil

These include butter, margarine, shoe polish, coffee with cream, chewing gum, cosmetic creams, vegetable oils, wax, crayon, tar and asphalt.

- Carefully scrape off excess stain, then use fabric cleaner (solvent type) as previously described.
- Shoe polish, wax crayons, tar and asphalt will stain if allowed to remain on trim. They should be removed as soon as possible. Use caution as cleaner will dissolve them and may cause them to bleed.

### Non-greasy stains

These include black coffee, egg, fruit, fruit juice, milk, soft drinks, wine, vomit and blood.

- Carefully scrape off excess stain, then sponge stain with cool water.
- If stain remains, use a multipurpose powdered cleaner (foam type) as previously described.
- If odour persists after cleaning vomit or urine, treat area with a water-waking soda solutions: 5 ml (1 teaspoon) baking soda to 250 ml (1 cup) warm water.
- Finally, if needed, clean lightly with fabric cleaner (solvent type).

### Combination stains

These include ice cream, mayonnaise, chilli sauce and unknown stains.

- Carefully scrape off excess stain, then clean with cool water and allow to dry.
- If stain remains, clean with fabric cleaner (solvent type).

## Cleaning vinyl or leather

Ordinary soilage can be removed with warm water and a mild soap such as saddle soap or oil soap.

- Apply a small amount of soap solution and allow to soak for a few minutes to loosen dirt, then rub briskly with a clean damp cloth to remove dirt and traces of soap. This may be repeated several times, if necessary.
- Some compounds such as tar, asphalt, shoe polish etc. will stain if allowed to remain to trim. They should be wiped off as quickly as possible and the area cleaned with a clean cloth dampened with vinyl cleaner (solvent type).

## Seat belts

- Clean seat belts only with mild soap and lukewarm water.
- DO NOT BLEACH OR DYE BELTS AS THIS MAY SEVERELY WEAKEN THEM.

CHAPTER 12

# Servicing

Page

12-2 Service intervals
12-3 Extreme operating conditions
12-4 Maintenance schedule
12-6 Service costs
12-7 Maintenance coupons

## SERVICE INTERVALS

When it comes to service, remember that your Holden Dealer has the trained personnel and specialised equipment to correctly service your vehicle. Your Dealer invites you to return for all your service needs both during and after the warranty period.

The safety, economy, emission control, performance and reliability of your vehicle cannot be assured unless regular maintenance is performed, preferably by factory-trained technicians at your Holden Dealer.

Therefore, it is in the owner's interest that the following services are performed at the specified Distance or Months (whichever occurs first).

| | |
|---|---|
| 5,000 km | - 3 months |
| 10,000 km | - 6 months |
| 20,000 km | - 1 year |
| 30,000 km | - 1.5 years |
| 40,000 km | - 2 years |
| 50,000 km | - 2.5 years |
| 60,000 km | - 3 years |
| 70,000 km | - 3.5 years |
| 80,000 km | - 4 years |
| 90,000 km | - 4.5 years |
| 100,000 km | - 5 years |
| 110,000 km | - 5.5 years |
| 120,000 km | - 6 years |

The three month (5,000 kilometres) service will be performed "labour free" by the Selling Dealer.

This service may be carried out by another Holden Dealer provided you have a letter of Introduction from the Selling Dealer.

Your Dealer will supply the necessary Letter of Introduction on request.

It is the owner's responsibility to have the diesel engine oil changed between the regular service interval of 10,000 km or 6 months.

The services shown in this schedule between 10,000 and 120,000 are to be performed again after 120,000 km at the same intervals.

NOTE: All maintenance services as listed in this handbook and replacement of service items are the responsibility of the owner and as such are NOT considered, under the provisions of the new vehicle warranty to be rectification of defective material and workmanship. Items such as wheel alignment, necessary adjustments to drive belts, transmission, clutch, parking brake, etc. or any other items which may require servicing due to fair wear and tear will be carried out at the owner's cost.

Failure to have proper maintenance services carried out by an Authorised Holden Dealer or service Dealer may void your new Vehicle Warranty if the work is not carried out in accordance with Holden's specifications. It is strongly recommended that you read the "New Vehicle Warranty" in Chapter 9 so that you are aware of your entitlements.

Service coupons are provided further on in this chapter. When each service is performed the coupon is removed so that the following service coupon is readily visible to remind you when the next service is due.

After the service is completed, the owner should check that the service has been validated, by the Dealer stamping and signing the coupon stub. This is important as it will not only assist in the determination of Warranty Claims, but will enhance the value of the vehicle when selling.

# EXTREME OPERATING CONDITIONS

If your vehicle operates under any of the extreme conditions listed in the following table it is recommended that some items be serviced more frequently than the intervals specified in the Maintenance Plan.

NOTE: The extra services listed below need only be used if your vehicle operates continuously under the conditions specified.

If you operate under any of these conditions on a one off basis e.g. holiday trip, then an extra service should be for that period only.

As a guide, if you operate continually for a period of one month or 1,000 kilometres under any of the extreme conditions, then this could qualify for additional services.

If at any time it is considered that the above items or other items should be more frequently serviced due to the type of operation or before a long trip, discuss the situation with the service manager of your Holden Dealer.

| | | | | |
|---|---|---|---|---|
| Change petrol engine oil every 5,000 km | | | C | D |
| Change diesel engine oil every 5,000 km | | | C | D |
| Replace petrol engine oil filter every 10,000 km | | | C | D |
| Replace diesel engine oil filter every 5,000 km | | | C | D |
| Change air cleaner element every 10,000 km | | | C | |
| Inspect pre air cleaner every 10,000 km | | | C | |
| Inspect steering system for looseness or damage every every 5,000 km | | B | | |
| Inspect universal joints and sleeve for wear every 5,000 km | | B | C | |
| Change manual transmission every 20,000 km | | B | | |
| Change auto trans fluid and strainer every 40,000 km | A | B | C | D |
| Change transfer case oil every 20,000 km | | B | | |
| Change differential oil every 20,000 km | | B | | |
| Inspect disc brake pads and discs every 5,000 km | A | B | C | |
| Replace timing belt @ 120,000 km | | | C | D |

A = Repeated short trips

B = Driving on rough roads

C= Driving on dusty roads

D = Repeated short trips in extremely cold weather

# MAINTENANCE SCHEDULE

FOR SERVICE SPECIFICATIONS AFTER 120,000, REFER TO TEAROUT SERVICE COUPONS.

| Use odometer reading or years, whichever occurs first | x 1,000 km | 5 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | or years | .25 | .5 | 1 | 1.5 | 2 | 2.5 | 3 | 3.5 | 4 | 4.5 | 5 | 5.5 | 6 |
| **UNDER BONNET** | | | | | | | | | | | | | | |
| P Engine oil * | | | R | R | R | R | R | R | R | R | R | R | R | R |
| P Engine oil filter * | | | R | | R | | R | | R | | R | | R | |
| D Engine oil * | | R | R | R | R | R | R | R | R | R | R | R | R | R |
| D Engine oil filter * | | | R | R | R | R | R | R | R | R | R | R | R | R |
| Oil contamination | | I | I | I | I | I | I | I | I | I | I | I | I | I |
| Fluid levels: power steering, brake, washer, auto trans, clutch, battery | | I | I | I | I | I | I | I | I | I | I | I | I | I |
| Coolant level 50% concentration | | I | I | I | I | I | I | I | I | I | I | R | I | I |
| Radiator cap and cooling system pressure test | | | | I | | I | | I | | I | | I | | I |
| P Timing belt | | Replace every 160,000 km | | | | | | | | | | | | |
| D Timing belt | | Replace every 200,000 km | | | | | | | | | | | | |
| All hoses and pipes in engine compartment for deterioration or leaks | | | I | I | I | I | I | I | I | I | I | I | I | I |
| Clean front of radiator core and A/C condensor | | | | I | | I | | I | | I | | I | | I |
| P Fuel filter | | | | R | | R | | R | | R | | R | | R |
| D Fuel filter | | | | | | R | | | | R | | | | R |
| Air cleaner element * | | I | | I | | I | | I | | R | | I | I | I |
| D Pre air cleaner * | | | | | | I | | | | I | | | | I |
| Accessory drive belt condition | | I | I | I | I | I | I | I | I | I | I | I | I | I |
| P Valve clearance | | | | | | | | | | | | A | | |
| D Valve clearance | | | | A | | | A | | | A | | | A | |
| P Spark plugs | | | | | | | | | | | | R | | |
| P Oxygen sensor | | Replace every 150,000 km or 7.5 years | | | | | | | | | | | | |
| Power steering fluid | | | | | | R | | | | R | | | | R |
| **UNDER VEHICLE** | | | | | | | | | | | | | | |
| Clutch fluid | | | | | | R | | | | R | | | | R |
| Brake fluid | | | | | | R | | | | R | | | | R |
| Manual trans fluid * | | I | I | I | I | R | I | I | I | R | I | I | I | R |
| Automatic transmission fluid * | | | | | | | | | | R | | | | |
| Transfer case fluid | | I | I | I | I | I | I | I | I | R | I | I | I | I |
| Universal joints and splines for wear * | | | I | I | I | I | I | I | I | I | I | I | I | I |
| Universal joints and sliding sleeve * | | L | L | L | L | L | L | L | L | L | L | L | L | L |
| Differential gear oil, rear * | | I | I | I | I | R | I | I | I | R | I | I | I | R |
| Differential gear oil, front * | | I | I | I | I | I | I | I | I | R | I | I | I | I |
| Disc brake pads and disc wear | | | I | I | I | I | I | I | I | I | I | I | I | I |
| Wheel nuts | | T | T | T | T | T | T | T | T | T | T | T | T | T |
| Front wheel bearing & locking hubs grease | | | | R | | | | | R | | | | | |

# *MAINTENANCE SCHEDULE CONT.*

| Use odometer reading or years, whichever occurs first | x1,000 km | 5 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | or years | .25 | .5 | 1 | 1.5 | 2 | 2.5 | 3 | 3.5 | 4 | 4.5 | 5 | 5.5 | 6 |
| **UNDER VEHICLE cont.** | | | | | | | | | | | | | | |
| Front and rear hub bearing for loosness | | | | I | | I | | I | | I | | I | | I |
| Vehicle ride height | | I | I | I | I | I | I | I | I | I | I | I | I | I |
| Tyre pressure and wheels and tyres for damage | | I | I | I | I | I | I | I | I | I | I | I | I | I |
| Tyre rotation | | | | | | Rotate as necessary | | | | | | | | |
| General under body check: steering and * suspension components (inc. shock absorbers, all rubber bushes and boots, ball joints and connections) park brake cables, fuel system, exhaust system, brake system, bolts, nuts, hoses, pipes and check for leaks. | | I | I | I | I | I | I | I | I | I | I | I | I | I |
| **INSIDE VEHICLE** | | | | | | | | | | | | | | |
| Clutch pedal travel and free play | | I | I | I | I | I | I | I | I | I | I | I | I | I |
| Steering wheel play | | I | I | I | I | I | I | I | I | I | I | I | I | I |
| Brake pedal travel and free play | | I | I | I | I | I | I | I | I | I | I | I | I | I |
| Park brake lever travel | | I | | I | | I | | I | | I | | I | | I |
| Park brake ratchet for wear or damage | | | | I | | I | | I | | I | | I | | I |
| **ROAD TEST** | | | | | | | | | | | | | | |
| Check vehicle on the road for braking, steering, engine response and trans operation. Check cruise control, park pawl operation, A/C performance and neutral start switch | | I | I | I | I | I | I | I | I | I | I | I | I | I |
| **SERVICE TIMES** | | | | | | | | | | | | | | |
| Petrol engine | | - | 1.2 | 2.1 | 1.2 | 2.2 | 1.2 | 2.1 | 1.9 | 2.3 | 1.2 | 6 | 1.2 | 2.2 |
| Diesel engine | | - | 1.2 | 4.1 | 1.2 | 1.9 | 3.2 | 2.1 | 1.9 | 4.3 | 1.2 | 1.2 | 3.2 | 1.9 |
| add for automatic transmission | | - | - | - | - | - | - | - | - | 0.4 | - | - | - | - |
| add for manual transmission | | - | - | - | - | 0.2 | - | - | - | 0.4 | - | - | - | 0.2 |

**I**: Inspect and correct or replace as necessary **R**: Replace or change
**T**: Tighten to specified torque **L**: Lubricate **A**: Adjust **P**: Petrol **D**: Diesel

*: under extreme operating conditions more frequent maintenance is required, refer page 12-3

## MAINTENANCE SCHEDULE

- The owner will be charged for all lubricants and materials used plus labour at the times recommended on the previous page.
- The repair or replacement of any part found faulty during a service check and not covered by Holden Warranty will be added to the charges.
- Where any deficiencies are noted, such items should be reported to the owner/ operator so that the extra work required can be authorised.
- The use of break-in oil, tune up compounds, friction reducing compounds and other supplemental additives are not recommended; their use will not only increase operating costs, but may indeed be harmful to your vehicle.

**5,000 km or 3 months**

This coupon should not be removed until the vehicle is presented for service.

**SERVICE COUPON**

Owner's Name Mr. Mrs. ..... Miss. Other.....

Address .....

Town .....

Town ..... State .....

Postcode .....

Reg. no. ..... Engine no .....

I.S.O.V.I.N. ..... Model .....

Selling Dealer's Stamp & Signature .....

---

Date of Acquisition .....

This vehicle has been thoroughly checked in accordance with the schedule on the reverse side of this coupon.

Servicing Dealer's Stamp & Signature .....

Servicing Dealer .....

Town ..... State .....

Owner's signature .....

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**This service will be carried out without charge to the owner. The owner will, however, be charged for any lubricants or parts used.**

P.T.O.

**5,000 km or 3 months Service Validation**

This vehicle has been thoroughly checked in accordance with the 5,000 km service.

Dealer .....

Service Manager's signature .....

Date ..... Odometer reading .....

## Under hood - petrol only

- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check accessory drive belt condition
- ❒ Check air cleaner element

## Under hood - diesel only

- ❒ Change engine oil
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check accessory drive belt condition
- ❒ Check air cleaner element

## Under vehicle - petrol and diesel

- ❒ Check/correct oil level: manual trans fluid
- ❒ Check level of transfer case fluid
- ❒ Check level of differential gear oil, front
- ❒ Check level of differential gear oil, rear
- ❒ Tighten wheel nuts
- ❒ Check tyre pressure and wheels and tyres for damage
- ❒ General under body check: steering and suspension components, (inc. shock absorbers, all rubber bushes and boots, ball joints and connections) park brake cables, fuel system, exhaust system, brake system, bolts, nuts, hoses, pipes and for leaks
- ❒ Lubricate universal joints and sliding sleeve
- ❒ Check vehicle ride height

## Interior - petrol and diesel

- ❒ Check clutch pedal travel and free play
- ❒ Check steering wheel play
- ❒ Check brake pedal travel and free play
- ❒ Check park brake lever travel

## Road test - petrol and diesel

- ❒ Check vehicle on the road for braking, steering, engine response and trans operation. Check cruise control, park pawl operation, A/C performance and neutral start switch.

**10,000 km or 6 months**

**SERVICE COUPON**

I authorise performance of the services specified on the rear of this coupon.
I understand I will be charged for the following hours of labour:

- 1.2 hours

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

.....

.....

Signature ..... Date .....

### Under hood - petrol only

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Check accessory drive belt condition

### Under hood - diesel only

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check idling speed and acceleration
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Check accessory drive belt condition

**10,000 km or 6 months Service Validation**

Servicing Dealer .....
Brake fluid changed: YES/NO
Date of Service .....
Odometer .....
Signed .....

Additional services performed: .....
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P.T.O.

## Under vehicle - petrol and diesel

- ❒ Check level of manual transmission fluid
- ❒ Check level of transfer case fluid
- ❒ Inspect universal joints and splines for wear
- ❒ Lubricate universal joints and sliding sleeve
- ❒ Check level of differential gear oil, front
- ❒ Check level of differential gear oil, rear
- ❒ Inspect disc brake pads and disc wear
- ❒ Tighten wheel nuts
- ❒ Check tyre pressure and wheels and tyres for damage
- ❒ General under body check: steering and suspension components, (inc. shock absorbers, all rubber bushes and boots, ball joints and connections) park brake cables, fuel system, exhaust system, brake system, bolts, nuts, hoses, pipes and for leaks
- ❒ Check vehicle ride height

## Interior - petrol and diesel

- ❒ Check clutch pedal travel and free play
- ❒ Check steering wheel play
- ❒ Check brake pedal travel and free play

## Road test - petrol and diesel

- ❒ Check vehicle on the road for braking, steering, engine response and trans operation. Check cruise control, park pawl operation, A/C performance and neutral start switch.

## 20,000 km or 1 year SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.
I understand I will be charged for the following hours of labour:

- 2.1 hours for petrol engine
- 4.1 hours for diesel engine

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

.....

.....

Signature ..... Date .....

### Under hood - petrol only

- ❒ Change engine oil
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check radiator cap and cooling system pressure
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Clean front of radiator core and A/C condenser
- ❒ Replace fuel filter
- ❒ Check air cleaner element
- ❒ Check accessory drive belt condition

**20,000 km or 1 year Service Validation**

Servicing Dealer .....
Brake fluid changed: YES/NO
Date of Service .....
Odometer .....
Signed .....

Additional services performed: .....
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P.T.O.

## Under hood - diesel only

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check radiator cap and cooling system pressure
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Clean front of radiator core and A/C condenser
- ❒ Check air cleaner element
- ❒ Check accessory drive belt condition
- ❒ Adjust valve clearance

## Under vehicle - petrol and diesel

- ❒ Check level of manual transmissionfluid
- ❒ Check level of transfer case fluid
- ❒ Inspect universal joints and splines for wear
- ❒ Lubricate universal joints and sliding sleeve
- ❒ Check level of differential gear oil, front
- ❒ Check level of differential gear oil, rear
- ❒ Inspect disc brake pads and disc wear
- ❒ Tighten wheel nuts
- ❒ Repack front wheel bearing and locking hubs
- ❒ Inspect front and rear hub bearings for looseness
- ❒ Check tyre pressure and wheels and tyres for damage
- ❒ General under body check: steering and suspension components, (inc. shock absorbers, all rubber bushes and boots, ball joints and connections) park brake cables, fuel system, exhaust system, brake system, bolts, nuts, hoses, pipes and for leaks
- ❒ Check vehicle ride height

## Interior - petrol and diesel

- ❒ Check clutch pedal travel and free play
- ❒ Check steering wheel play
- ❒ Check brake pedal travel and free play
- ❒ Check park brake lever travel
- ❒ Check park brake ratchet for wear or damage

## Road test - petrol and diesel

- ❒ Check vehicle on the road for braking, steering, engine response and trans operation. Check cruise control, park pawl operation, A/C performance and neutral start switch.

**30,000 km or 1½ years SERVICE COUPON**

I authorise performance of the services specified on the rear of this coupon.
I understand I will be charged for the following hours of labour:

- 1.2 hours

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

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Signature ..... Date .....

**30,000 km or 1½ years Service Validation**

Servicing Dealer .....
Brake fluid changed: YES/NO
Date of Service .....
Odometer .....
Signed .....

Additional services performed: .....
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## Under hood - petrol only

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Check accessory drive belt condition

## Under hood - diesel only

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Check accessory drive belt condition

P.T.O.

## Under vehicle - petrol and diesel

- ❒ Check level of manual transmission fluid
- ❒ Check level of transfer case fluid
- ❒ Inspect universal joints and splines for wear
- ❒ Lubricate universal joints and sliding sleeve
- ❒ Check level of differential gear oil, front
- ❒ Check level of differential gear oil, rear
- ❒ Inspect disc brake pads and disc wear
- ❒ Tighten wheel nuts
- ❒ Check tyre pressure and wheels and tyres for damage
- ❒ General under body check: steering and suspension components, (inc. shock absorbers, all rubber bushes and boots, ball joints and connections) park brake cables, fuel system, exhaust system, brake system, bolts, nuts, hoses, pipes and for leaks
- ❒ Check vehicle ride height

## Interior - petrol and diesel

- ❒ Check clutch pedal travel and free play
- ❒ Check steering wheel play
- ❒ Check brake pedal travel and free play

## Road test - petrol and diesel

- ❒ Check vehicle on the road for braking, steering, engine response and trans operation. Check cruise control, park pawl operation, A/C performance and neutral start switch.

**40,000 km or 2 years SERVICE COUPON**

I authorise performance of the services specified on the rear of this coupon.
I understand I will be charged for the following hours of labour:

- 2.2 hours for petrol engine
- 1.9 hours for diesel engine
- add 0.2 hours for manual trans

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

.....

.....

Signature ..... Date .....

**Under hood - petrol only**

- ❒ Change engine oil
- ❒ Check for oil contamination
- ❒ Check fluid levels: washer, auto trans.
- ❒ Check/correct coolant level and % concentration
- ❒ Check radiator cap and cooling system pressure
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Clean front of radiator core and A/C condenser
- ❒ Replace fuel filter
- ❒ Check air cleaner element
- ❒ Check accessory drive belt condition
- ❒ Replace power steering fluid

**40,000 km or 2 years Service Validation**

Servicing Dealer .....
Brake fluid changed: YES/NO
Date of Service .....
Odometer .....
Signed .....

Additional services performed: .....
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P.T.O.

## Under hood - diesel only

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check fluid levels: washer, auto trans.
- ❒ Replace coolant
- ❒ Check radiator cap and cooling system pressure
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Clean front of radiator core and A/C condenser
- ❒ Replace fuel filter
- ❒ Check air cleaner element
- ❒ Check pre air cleaner
- ❒ Check accessory drive belt condition
- ❒ Replace power steering fluid

## Under vehicle - petrol and diesel

- ❒ Change clutch fluid
- ❒ Change brake fluid
- ❒ Change manual transmission fluid
- ❒ Check level of transfer case fluid
- ❒ Inspect universal joints and splines for wear
- ❒ Lubricate universal joints and sliding sleeve
- ❒ Check level of differential gear oil, front
- ❒ Change differential gear oil, rear
- ❒ Inspect disc brake pads and disc wear
- ❒ Tighten wheel nuts
- ❒ Inspect front and rear hub bearings for looseness
- ❒ Check tyre pressure and wheels and tyres for damage
- ❒ General under body check: steering and suspension components, (inc. shock absorbers, all rubber bushes and boots, ball joints and connections) park brake cables, fuel system, exhaust system, brake system, bolts, nuts, hoses, pipes and for leaks
- ❒ Check vehicle ride height

## Interior - petrol and diesel

- ❒ Check clutch pedal travel and free play
- ❒ Check steering wheel play
- ❒ Check brake pedal travel and free play
- ❒ Check park brake lever travel
- ❒ Check park brake ratchet for wear or damage

## Road test - petrol and diesel

- ❒ Check vehicle on the road for braking, steering, engine response and trans operation. Check cruise control, park pawl operation, A/C performance and neutral start switch.

**50,000 km or 2½ years SERVICE COUPON**

I authorise performance of the services specified on the rear of this coupon.
I understand I will be charged for the following hours of labour:

- 1.2 hours for petrol engine
- 3.2 hours for diesel engine

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

.....

.....

Signature ..... Date .....

### Under hood - petrol only

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Check accessory drive belt condition

### Under hood - diesel only

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Check accessory drive belt condition
- ❒ Adjust valve clearance

**50,000 km or 2½ years Service Validation**

Servicing Dealer .....
Brake fluid changed: YES/NO
Date of Service .....
Odometer .....
Signed .....

Additional services performed: .....
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P.T.O.

## Under vehicle - petrol and diesel

- ❒ Check level of manual transmission fluid
- ❒ Check level of transfer case fluid
- ❒ Inspect universal joints and splines for wear
- ❒ Lubricate universal joints and sliding sleeve
- ❒ Check level of differential gear oil, front
- ❒ Check level of differential gear oil, rear
- ❒ Inspect disc brake pads and disc wear
- ❒ Tighten wheel nuts
- ❒ Check tyre pressure and wheels and tyres for damage
- ❒ General under body check: steering and suspension components, (inc. shock absorbers, all rubber bushes and boots, ball joints and connections) park brake cables, fuel system, exhaust system, brake system, bolts, nuts, hoses, pipes and for leaks
- ❒ Check vehicle ride height

## Interior - petrol and diesel

- ❒ Check clutch pedal travel and free play
- ❒ Check steering wheel play
- ❒ Check brake pedal travel and free play

## Road test - petrol and diesel

- ❒ Check vehicle on the road for braking, steering, engine response and trans operation. Check cruise control, park pawl operation, A/C performance and neutral start switch.

**60,000 km or 3 years SERVICE COUPON**

I authorise performance of the services specified on the rear of this coupon.
I understand I will be charged for the following hours of labour:

- 2.1 hours

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

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Signature ..... Date .....

**60,000 km or 3 years Service Validation**

Servicing Dealer .....
Brake fluid changed: YES/NO
Date of Service .....
Odometer .....
Signed .....

Additional services performed: .....
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**Under hood - petrol only**

- ❒ Change engine oil
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check radiator cap and cooling system pressure
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Clean front of radiator core and A/C condenser
- ❒ Replace fuel filter
- ❒ Check air cleaner element
- ❒ Check accessory drive belt condition

P.T.O.

### Under hood - diesel only

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check radiator cap and cooling system pressure
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Clean front of radiator core and A/C condenser
- ❒ Check air cleaner element
- ❒ Check accessory drive belt condition

### Under vehicle - petrol and diesel

- ❒ Check level of manual transmission fluid
- ❒ Check level of transfer case fluid
- ❒ Inspect universal joints and splines for wear
- ❒ Lubricate universal joints and sliding sleeve
- ❒ Check level of differential gear oil, front
- ❒ Check level of differential gear oil, rear
- ❒ Inspect disc brake pads and disc wear
- ❒ Tighten wheel nuts
- ❒ Inspect front and rear hub bearings for looseness
- ❒ Check tyre pressure and wheels and tyres for damage
- ❒ General under body check: steering and suspension components, (inc. shock absorbers, all rubber bushes and boots, ball joints and connections) park brake cables, fuel system, exhaust system, brake system, bolts, nuts, hoses, pipes and for leaks
- ❒ Check vehicle ride height

### Interior - petrol and diesel

- ❒ Check clutch pedal travel and free play
- ❒ Check steering wheel play
- ❒ Check brake pedal travel and free play
- ❒ Check park brake lever travel
- ❒ Check park brake ratchet for wear or damage

### Road test - petrol and diesel

- ❒ Check vehicle on the road for braking, steering, engine response and trans operation. Check cruise control, park pawl operation, A/C performance and neutral start switch.

**70,000 km or 3½ years SERVICE COUPON**

I authorise performance of the services specified on the rear of this coupon.
I understand I will be charged for the following hours of labour:

- 1.9 hours

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

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.....

Signature ..... Date .....

**70,000 km or 3½ years Service Validation**

Servicing Dealer .....
Brake fluid changed: YES/NO
Date of Service .....
Odometer .....
Signed .....

Additional services performed: .....
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### Under hood - petrol only

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Check accessory drive belt condition

### Under hood - diesel only

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Check accessory drive belt condition

P.T.O.

## Under vehicle - petrol and diesel

- ❒ Check level of manual transmission fluid
- ❒ Check level of transfer case fluid
- ❒ Inspect universal joints and splines for wear
- ❒ Lubricate universal joints and sliding sleeve
- ❒ Check level of differential gear oil, front
- ❒ Check level of differential gear oil, rear
- ❒ Inspect disc brake pads and disc wear
- ❒ Tighten wheel nuts
- ❒ Repack front wheel bearing and locking hubs
- ❒ Check tyre pressure and wheels and tyres for damage
- ❒ General under body check: steering and suspension components, (inc. shock absorbers, all rubber bushes and boots, ball joints and connections) park brake cables, fuel system, exhaust system, brake system, bolts, nuts, hoses, pipes and for leaks
- ❒ Check vehicle ride height

## Interior - petrol and diesel

- ❒ Check clutch pedal travel and free play
- ❒ Check steering wheel play
- ❒ Check brake pedal travel and free play

## Road test - petrol and diesel

- ❒ Check vehicle on the road for braking, steering, engine response and trans operation. Check cruise control, park pawl operation, A/C performance and neutral start switch.

## 80,000 km or 4 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.
I understand I will be charged for the following hours of labour:

- 2.3 hours for petrol engine
- 4.3 hours for diesel engine
- add 0.4 hours for auto trans
- add 0.4 hours for manual trans

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

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Signature ..... Date .....

Additional services performed: .....

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**80,000 km or 4 years Service Validation**

Servicing Dealer .....

Brake fluid changed: YES/NO

Date of Service .....

Odometer .....

Signed .....

### Under hood - petrol only

- ❒ Change engine oil
- ❒ Check for oil contamination
- ❒ Check fluid level: washer
- ❒ Check/correct coolant level and % concentration
- ❒ Check radiator cap and cooling system pressure
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Clean front of radiator core and A/C condenser
- ❒ Replace fuel filter
- ❒ Replace air cleaner element
- ❒ Check accessory drive belt condition
- ❒ Replace power steering fluid

## Under hood - diesel only

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check fluid levels: washer
- ❒ Replace coolant
- ❒ Check radiator cap and cooling system pressure
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Clean front of radiator core and A/C condenser
- ❒ Replace fuel filter
- ❒ Replace air cleaner element
- ❒ Check pre air cleaner
- ❒ Check accessory drive belt condition
- ❒ Adjust valve clearance
- ❒ Replace power steering fluid

## Under vehicle - petrol and diesel

- ❒ Change clutch fluid
- ❒ Change brake fluid
- ❒ Change manual transmission fluid
- ❒ Change automatic transmission fluid
- ❒ Change transfer case fluid
- ❒ Inspect universal joints and splines for wear
- ❒ Lubricate universal joints and sliding sleeve
- ❒ Change differential gear oil, front
- ❒ Change differential gear oil, rear
- ❒ Inspect disc brake pads and disc wear
- ❒ Tighten wheel nuts
- ❒ Inspect front and rear hub bearings for looseness
- ❒ Check tyre pressure and wheels and tyres for damage
- ❒ General under body check: steering and suspension components, (inc. shock absorbers, all rubber bushes and boots, ball joints and connections) park brake cables, fuel system, exhaust system, brake system, bolts, nuts, hoses, pipes and for leaks
- ❒ Check vehicle ride height

## Interior - petrol and diesel

- ❒ Check clutch pedal travel and free play
- ❒ Check steering wheel play
- ❒ Check brake pedal travel and free play
- ❒ Check park brake lever travel
- ❒ Check park brake ratchet for wear or damage

## Road test - petrol and diesel

- ❒ Check vehicle on the road for braking, steering, engine response and trans operation. Check cruise control, park pawl operation, A/C performance and neutral start switch.

**90,000 km or 4½ years SERVICE COUPON**

I authorise performance of the services specified on the rear of this coupon.
I understand I will be charged for the following hours of labour:

- 1.2 hours

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

.....

.....

Signature ..... Date .....

### Under hood - petrol only

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Check accessory drive belt condition

### Under hood - diesel only

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Check accessory drive belt condition

**90,000 km or 4½ years Service Validation**

Servicing Dealer .....
Brake fluid changed: YES/NO
Date of Service .....
Odometer .....
Signed .....

Additional services performed: .....
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P.T.O.

## Under vehicle - petrol and diesel

- ❒ Check level of manual transmission fluid
- ❒ Check level of transfer case fluid
- ❒ Inspect universal joints and splines for wear
- ❒ Lubricate universal joints and sliding sleeve
- ❒ Check level of differential gear oil, front
- ❒ Check level of differential gear oil, rear
- ❒ Inspect disc brake pads and disc wear
- ❒ Tighten wheel nuts
- ❒ Check tyre pressure and wheels and tyres for damage
- ❒ General under body check: steering and suspension components, (inc. shock absorbers, all rubber bushes and boots, ball joints and connections) park brake cables, fuel system, exhaust system, brake system, bolts, nuts, hoses, pipes and for leaks
- ❒ Check vehicle ride height

## Interior - petrol and diesel

- ❒ Check clutch pedal travel and free play
- ❒ Check steering wheel play
- ❒ Check brake pedal travel and free play

## Road test - petrol and diesel

- ❒ Check vehicle on the road for braking, steering, engine response and trans operation. Check cruise control, park pawl operation, A/C performance and neutral start switch.

**100,000 km or 5 years SERVICE COUPON**

I authorise performance of the services specified on the rear of this coupon.
I understand I will be charged for the following hours of labour:

- 6.0 hours for petrol engine
- 1.2 hours for diesel engine

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

.....

.....

Signature ..... Date .....

**100,000 km or 5 years Service Validation**

Servicing Dealer .....
Brake fluid changed: YES/NO
Date of Service .....
Odometer .....
Signed .....

Additional services performed: .....
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## Under hood - petrol only

- ❒ Change engine oil
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Replace coolant
- ❒ Check radiator cap and cooling system pressure
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Clean front of radiator core and A/C condenser
- ❒ Replace fuel filter
- ❒ Check air cleaner element
- ❒ Check accessory drive belt condition
- ❒ Adjust valve clearance
- ❒ Replace spark plugs

P.T.O.

### Under hood - diesel only

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check radiator cap and cooling system pressure
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Clean front of radiator core and A/C condenser
- ❒ Check air cleaner element
- ❒ Check accessory drive belt condition

### Under vehicle - petrol and diesel

- ❒ Check level of manual transmission fluid
- ❒ Check level of transfer case fluid
- ❒ Inspect universal joints and splines for wear
- ❒ Lubricate universal joints and sliding sleeve
- ❒ Check level of differential gear oil, front
- ❒ Check level of differential gear oil, rear
- ❒ Inspect disc brake pads and disc wear
- ❒ Tighten wheel nuts
- ❒ Inspect front and rear hub bearings for looseness
- ❒ Check tyre pressure and wheels and tyres for damage
- ❒ General under body check: steering and suspension components, (inc. shock absorbers, all rubber bushes and boots, ball joints and connections) park brake cables, fuel system, exhaust system, brake system, bolts, nuts, hoses, pipes and for leaks
- ❒ Check vehicle ride height

### Interior - petrol and diesel

- ❒ Check clutch pedal travel and free play
- ❒ Check steering wheel play
- ❒ Check brake pedal travel and free play
- ❒ Check park brake lever travel
- ❒ Check park brake ratchet for wear or damage

### Road test - petrol and diesel

- ❒ Check vehicle on the road for braking, steering, engine response and trans operation. Check cruise control, park pawl operation, A/C performance and neutral start switch.

**110,000 km or 5½ years SERVICE COUPON**

I authorise performance of the services specified on the rear of this coupon.
I understand I will be charged for the following hours of labour:

- 1.2 hours for petrol engine
- 3.2 hours for diesel engine

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

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Signature ..... Date .....

**Under hood - petrol only**

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Check accessory drive belt condition

**Under hood - diesel only**

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Check accessory drive belt condition
- ❒ Adjust valve clearance

P.T.O.

**110,000 km or 5½ years Service Validation**

Servicing Dealer .....
Brake fluid changed: YES/NO
Date of Service .....
Odometer .....
Signed .....

Additional services performed: .....
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## Under vehicle - petrol and diesel

- ❒ Check level of manual transmission fluid
- ❒ Check level of transfer case fluid
- ❒ Inspect universal joints and splines for wear
- ❒ Lubricate universal joints and sliding sleeve
- ❒ Check level of differential gear oil, front
- ❒ Check level of differential gear oil, rear
- ❒ Inspect disc brake pads and disc wear
- ❒ Tighten wheel nuts
- ❒ Check tyre pressure and wheels and tyres for damage
- ❒ General under body check: steering and suspension components, (inc. shock absorbers, all rubber bushes and boots, ball joints and connections) park brake cables, fuel system, exhaust system, brake system, bolts, nuts, hoses, pipes and for leaks
- ❒ Check vehicle ride height

## Interior - petrol and diesel

- ❒ Check clutch pedal travel and free play
- ❒ Check steering wheel play
- ❒ Check brake pedal travel and free play

## Road test - petrol and diesel

- ❒ Check vehicle on the road for braking, steering, engine response and trans operation. Check cruise control, park pawl operation, A/C performance and neutral start switch.

## 120,000 km or 6 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.
I understand I will be charged for the following hours of labour:

- 2.2 hours for petrol engine
- 1.9 hours for diesel engine
- add 0.2 hours for manual trans

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

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Signature ..... Date .....

Additional services performed: .....
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## 120,000 km or 6 years Service Validation

Servicing Dealer .....
Brake fluid changed: YES/NO
Date of Service .....
Odometer .....
Signed .....

### Under hood - petrol only

- ❒ Change engine oil
- ❒ Check for oil contamination
- ❒ Check fluid levels: washer, auto trans
- ❒ Check/correct coolant level and % concentration
- ❒ Check radiator cap and cooling system pressure
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Clean front of radiator core and A/C condenser
- ❒ Replace fuel filter
- ❒ Check air cleaner element
- ❒ Check accessory drive belt condition
- ❒ Replace power steering fluid

P.T.O.

### Under hood - diesel only

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check fluid levels: washer, auto trans
- ❒ Replace coolant
- ❒ Check radiator cap and cooling system pressure
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Clean front of radiator core and A/C condenser
- ❒ Replace fuel filter
- ❒ Check air cleaner element
- ❒ Check pre air cleaner
- ❒ Check accessory drive belt condition
- ❒ Replace power steering fluid

### Under vehicle - petrol and diesel

- ❒ Change clutch fluid
- ❒ Change brake fluid
- ❒ Change manual transmission fluid
- ❒ Check level of transfer case fluid
- ❒ Inspect universal joints and splines for wear
- ❒ Lubricate universal joints and sliding sleeve
- ❒ Check level of differential gear oil, front
- ❒ Change differential gear oil, rear
- ❒ Inspect disc brake pads and disc wear
- ❒ Tighten wheel nuts
- ❒ Inspect front and rear hub bearings for looseness
- ❒ Check tyre pressure and wheels and tyres for damage
- ❒ General under body check: steering and suspension components, (inc. shock absorbers, all rubber bushes and boots, ball joints and connections) park brake cables, fuel system, exhaust system, brake system, bolts, nuts, hoses, pipes and for leaks
- ❒ Check vehicle ride height

### Interior - petrol and diesel

- ❒ Check clutch pedal travel and free play
- ❒ Check steering wheel play
- ❒ Check brake pedal travel and free play
- ❒ Check park brake lever travel
- ❒ Check park brake ratchet for wear or damage

### Road test - petrol and diesel

- ❒ Check vehicle on the road for braking, steering, engine response and trans operation. Check cruise control, park pawl operation, A/C performance and neutral start switch.

## 130,000 km or 6½ years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.
I understand I will be charged for the following hours of labour:

- 1.2 hours

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

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Signature ..... Date .....

### Under hood - petrol only

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Check accessory drive belt condition

### Under hood - diesel only

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Check accessory drive belt condition

P.T.O.

**130,000 km or 6½ years Service Validation**

Servicing Dealer .....
Brake fluid changed: YES/NO
Date of Service .....
Odometer .....
Signed .....

Additional services performed: .....
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## Under vehicle - petrol and diesel

- ❒ Check level of manual transmission fluid
- ❒ Check level of transfer case fluid
- ❒ Inspect universal joints and splines for wear
- ❒ Lubricate universal joints and sliding sleeve
- ❒ Check level of differential gear oil, front
- ❒ Check level of differential gear oil, rear
- ❒ Inspect disc brake pads and disc wear
- ❒ Tighten wheel nuts
- ❒ Check tyre pressure and wheels and tyres for damage
- ❒ General under body check: steering and suspension components, (inc. shock absorbers, all rubber bushes and boots, ball joints and connections) park brake cables, fuel system, exhaust system, brake system, bolts, nuts, hoses, pipes and for leaks
- ❒ Check vehicle ride height

## Interior - petrol and diesel

- ❒ Check clutch pedal travel and free play
- ❒ Check steering wheel play
- ❒ Check brake pedal travel and free play

## Road test - petrol and diesel

- ❒ Check vehicle on the road for braking, steering, engine response and trans operation. Check cruise control, park pawl operation, A/C performance and neutral start switch.

**140,000 km or 7 years SERVICE COUPON**

I authorise performance of the services specified on the rear of this coupon.
I understand I will be charged for the following hours of labour:

- 2.1 hours for petrol engine
- 4.1 hours for diesel engine

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

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Signature ..... Date .....

**140,000 km or 7 years Service Validation**

Servicing Dealer .....
Brake fluid changed: YES/NO
Date of Service .....
Odometer .....
Signed .....

Additional services performed: .....
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### Under hood - petrol only

- ❒ Change engine oil
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check radiator cap and cooling system pressure
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Clean front of radiator core and A/C condenser
- ❒ Replace fuel filter
- ❒ Check air cleaner element
- ❒ Check accessory drive belt condition

P.T.O.

### Under hood - diesel only

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check radiator cap and cooling system pressure
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Clean front of radiator core and A/C condenser
- ❒ Check air cleaner element
- ❒ Check accessory drive belt condition
- ❒ Adjust valve clearance

### Under vehicle - petrol and diesel

- ❒ Check level of manual transmission fluid
- ❒ Check level of transfer case fluid
- ❒ Inspect universal joints and splines for wear
- ❒ Lubricate universal joints and sliding sleeve
- ❒ Check level of differential gear oil, front
- ❒ Check level of differential gear oil, rear
- ❒ Inspect disc brake pads and disc wear
- ❒ Tighten wheel nuts
- ❒ Repack front wheel bearing and locking hubs
- ❒ Inspect front and rear hub bearings for looseness
- ❒ Check tyre pressure and wheels and tyres for damage
- ❒ General under body check: steering and suspension components, (inc. shock absorbers, all rubber bushes and boots, ball joints and connections) park brake cables, fuel system, exhaust system, brake system, bolts, nuts, hoses, pipes and for leaks
- ❒ Check vehicle ride height

### Interior - petrol and diesel

- ❒ Check clutch pedal travel and free play
- ❒ Check steering wheel play
- ❒ Check brake pedal travel and free play
- ❒ Check park brake lever travel
- ❒ Check park brake ratchet for wear or damage

### Road test - petrol and diesel

- ❒ Check vehicle on the road for braking, steering, engine response and trans operation. Check cruise control, park pawl operation, A/C performance and neutral start switch.

**150,000 km or 7½ years SERVICE COUPON**

I authorise performance of the services specified on the rear of this coupon.
I understand I will be charged for the following hours of labour:

- 1.2 hours

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

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Signature ..... Date .....

**150,000 km or 7½ years Service Validation**

Servicing Dealer .....
Brake fluid changed: YES/NO
Date of Service .....
Odometer .....
Signed .....

Additional services performed: .....
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### Under hood - petrol only

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Check accessory drive belt condition

### Under hood - diesel only

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Check accessory drive belt condition

P.T.O.

## Under vehicle - petrol and diesel

- ❒ Check level of manual transmission fluid
- ❒ Check level of transfer case fluid
- ❒ Inspect universal joints and splines for wear
- ❒ Lubricate universal joints and sliding sleeve
- ❒ Check level of differential gear oil, front
- ❒ Check level of differential gear oil, rear
- ❒ Inspect disc brake pads and disc wear
- ❒ Tighten wheel nuts
- ❒ Check tyre pressure and wheels and tyres for damage
- ❒ General under body check: steering and suspension components, (inc. shock absorbers, all rubber bushes and boots, ball joints and connections) park brake cables, fuel system, exhaust system, brake system, bolts, nuts, hoses, pipes and for leaks
- ❒ Check vehicle ride height

## Interior - petrol and diesel

- ❒ Check clutch pedal travel and free play
- ❒ Check steering wheel play
- ❒ Check brake pedal travel and free play

## Road test - petrol and diesel

- ❒ Check vehicle on the road for braking, steering, engine response and trans operation. Check cruise control, park pawl operation, A/C performance and neutral start switch.

## 160,000 km or 8 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.
I understand I will be charged for the following hours of labour:

- 2.3 hours for petrol engine
- 2.3 hours for diesel engine
- add 0.4 hours for auto trans
- add 0.4 hours for manual trans

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

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Signature ..... Date .....

### Under hood - petrol only

- ❒ Change engine oil
- ❒ Check for oil contamination
- ❒ Check fluid levels: washer.
- ❒ Check/correct coolant level and % concentration
- ❒ Check radiator cap and cooling system pressure
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Clean front of radiator core and A/C condenser
- ❒ Replace fuel filter
- ❒ Replace air cleaner element
- ❒ Check accessory drive belt condition
- ❒ Replace power steering fluid

**160,000 km or 8 years Service Validation**

Servicing Dealer .....
Brake fluid changed: YES/NO
Date of Service .....
Odometer .....
Signed .....

Additional services performed: .....
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P.T.O.

### Under hood - diesel only

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check fluid levels: washer
- ❒ Replace coolant
- ❒ Check radiator cap and cooling system pressure
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Clean front of radiator core and A/C condenser
- ❒ Replace fuel filter
- ❒ Replace air cleaner element
- ❒ Check pre air cleaner
- ❒ Check accessory drive belt condition
- ❒ Replace power steering fluid

### Under vehicle - petrol and diesel

- ❒ Change clutch fluid
- ❒ Change brake fluid
- ❒ Change manual transmission fluid
- ❒ Change transfer case fluid
- ❒ Change automatic transmission fluid
- ❒ Inspect universal joints and splines for wear
- ❒ Lubricate universal joints and sliding sleeve
- ❒ Change differential gear oil, front
- ❒ Change differential gear oil, rear
- ❒ Inspect disc brake pads and disc wear
- ❒ Tighten wheel nuts
- ❒ Inspect front and rear hub bearings for looseness
- ❒ Check tyre pressure and wheels and tyres for damage
- ❒ General under body check: steering and suspension components, (inc. shock absorbers, all rubber bushes and boots, ball joints and connections) park brake cables, fuel system, exhaust system, brake system, bolts, nuts, hoses, pipes and for leaks
- ❒ Check vehicle ride height

### Interior - petrol and diesel

- ❒ Check clutch pedal travel and free play
- ❒ Check steering wheel play
- ❒ Check brake pedal travel and free play
- ❒ Check park brake lever travel
- ❒ Check park brake ratchet for wear or damage

### Road test - petrol and diesel

- ❒ Check vehicle on the road for braking, steering, engine response and trans operation. Check cruise control, park pawl operation, A/C performance and neutral start switch.

## 170,000 km or 8½ years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.
I understand I will be charged for the following hours of labour:

- 1.2 hours for petrol engine
- 3.2 hours for diesel engine

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

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Signature ..... Date .....

### Under hood - petrol only

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Check accessory drive belt condition

### Under hood - diesel only

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Check accessory drive belt condition
- ❒ Adjust valve clearance

P.T.O.

**170,000 km or 8½ years Service Validation**

Servicing Dealer .....
Brake fluid changed: YES/NO
Date of Service .....
Odometer .....
Signed .....

Additional services performed: .....
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## Under vehicle - petrol and diesel

- ❒ Check level of manual transmission fluid
- ❒ Check level of transfer case fluid
- ❒ Inspect universal joints and splines for wear
- ❒ Lubricate universal joints and sliding sleeve
- ❒ Check level of differential gear oil, front
- ❒ Check level of differential gear oil, rear
- ❒ Inspect disc brake pads and disc wear
- ❒ Tighten wheel nuts
- ❒ Check tyre pressure and wheels and tyres for damage
- ❒ General under body check: steering and suspension components, (inc. shock absorbers, all rubber bushes and boots, ball joints and connections) park brake cables, fuel system, exhaust system, brake system, bolts, nuts, hoses, pipes and for leaks
- ❒ Check vehicle ride height

## Interior - petrol and diesel

- ❒ Check clutch pedal travel and free play
- ❒ Check steering wheel play
- ❒ Check brake pedal travel and free play

## Road test - petrol and diesel

- ❒ Check vehicle on the road for braking, steering, engine response and trans operation. Check cruise control, park pawl operation, A/C performance and neutral start switch.

**180,000 km or 9 years SERVICE COUPON**

I authorise performance of the services specified on the rear of this coupon.
I understand I will be charged for the following hours of labour:

- 2.1 hours

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

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Signature ..... Date .....

**180,000 km or 9 years Service Validation**

Servicing Dealer .....
Brake fluid changed: YES/NO
Date of Service .....
Odometer .....
Signed .....

Additional services performed: .....
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### Under hood - petrol only

- ❒ Change engine oil
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check radiator cap and cooling system pressure
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Clean front of radiator core and A/C condenser
- ❒ Replace fuel filter
- ❒ Check air cleaner element
- ❒ Check accessory drive belt condition

P.T.O.

### Under hood - diesel only

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check radiator cap and cooling system pressure
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Clean front of radiator core and A/C condenser
- ❒ Check air cleaner element
- ❒ Check accessory drive belt condition

### Under vehicle - petrol and diesel

- ❒ Check level of manual transmission fluid
- ❒ Check level of transfer case fluid
- ❒ Inspect universal joints and splines for wear
- ❒ Lubricate universal joints and sliding sleeve
- ❒ Check level of differential gear oil, front
- ❒ Check level of differential gear oil, rear
- ❒ Inspect disc brake pads and disc wear
- ❒ Tighten wheel nuts
- ❒ Inspect front and rear hub bearings for looseness
- ❒ Check tyre pressure and wheels and tyres for damage
- ❒ General under body check: steering and suspension components, (inc. shock absorbers, all rubber bushes and boots, ball joints and connections) park brake cables, fuel system, exhaust system, brake system, bolts, nuts, hoses, pipes and for leaks
- ❒ Check vehicle ride height

### Interior - petrol and diesel

- ❒ Check clutch pedal travel and free play
- ❒ Check steering wheel play
- ❒ Check brake pedal travel and free play
- ❒ Check park brake lever travel
- ❒ Check park brake ratchet for wear or damage

### Road test - petrol and diesel

- ❒ Check vehicle on the road for braking, steering, engine response and trans operation. Check cruise control, park pawl operation, A/C performance and neutral start switch.

**190,000 km or 9½ years SERVICE COUPON**

I authorise performance of the services specified on the rear of this coupon.
I understand I will be charged for the following hours of labour:

- 1.2 hours

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

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Signature ..... Date .....

**Under hood - petrol only**

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Check accessory drive belt condition

**Under hood - diesel only**

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Check accessory drive belt condition

P.T.O.

**190,000 km or 9½ years Service Validation**

Servicing Dealer .....
Brake fluid changed: YES/NO
Date of Service .....
Odometer .....
Signed .....

Additional services performed: .....
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## Under vehicle - petrol and diesel

- ❒ Check level of manual transmission fluid
- ❒ Check level of transfer case fluid
- ❒ Inspect universal joints and splines for wear
- ❒ Lubricate universal joints and sliding sleeve
- ❒ Check level of differential gear oil, front
- ❒ Check level of differential gear oil, rear
- ❒ Inspect disc brake pads and disc wear
- ❒ Tighten wheel nuts
- ❒ Check tyre pressure and wheels and tyres for damage
- ❒ General under body check: steering and suspension components, (inc. shock absorbers, all rubber bushes and boots, ball joints and connections) park brake cables, fuel system, exhaust system, brake system, bolts, nuts, hoses, pipes and for leaks
- ❒ Check vehicle ride height

## Interior - petrol and diesel

- ❒ Check clutch pedal travel and free play
- ❒ Check steering wheel play
- ❒ Check brake pedal travel and free play

## Road test - petrol and diesel

- ❒ Check vehicle on the road for braking, steering, engine response and trans operation. Check cruise control, park pawl operation, A/C performance and neutral start switch.

## 200,000 km or 10 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.
I understand I will be charged for the following hours of labour:

- 6.2 hours for petrol engine
- 4.1 hours for diesel engine
- add 0.2 hours for manual trans

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

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Signature ..... Date .....

Additional services performed: .....
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**200,000 km or 10 years Service Validation**

Servicing Dealer .....
Brake fluid changed: YES/NO
Date of Service .....
Odometer .....
Signed .....

### Under hood - petrol only

- ❒ Change engine oil
- ❒ Check for oil contamination
- ❒ Check fluid levels: washer, auto trans
- ❒ Replace coolant
- ❒ Check radiator cap and cooling system pressure
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Clean front of radiator core and A/C condenser
- ❒ Replace fuel filter
- ❒ Check air cleaner element
- ❒ Check accessory drive belt condition
- ❒ Replace power steering fluid
- ❒ Adjust valve clearance
- ❒ Replace spark plugs

P.T.O.

### Under hood - diesel only

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check fluid levels: washer, auto trans
- ❒ Replace coolant
- ❒ Check radiator cap and cooling system pressure
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Clean front of radiator core and A/C condenser
- ❒ Replace fuel filter
- ❒ Check air cleaner element
- ❒ Check pre air cleaner
- ❒ Check accessory drive belt condition
- ❒ Adjust valve clearance
- ❒ Replace power steering fluid

### Under vehicle - petrol and diesel

- ❒ Change clutch fluid
- ❒ Change brake fluid
- ❒ Change manual transmission fluid
- ❒ Check level of transfer case fluid
- ❒ Inspect universal joints and splines for wear
- ❒ Lubricate universal joints and sliding sleeve
- ❒ Check level of differential gear oil, front
- ❒ Change differential gear oil, rear
- ❒ Inspect disc brake pads and disc wear
- ❒ Tighten wheel nuts
- ❒ Inspect front and rear hub bearings for looseness
- ❒ Check tyre pressure and wheels and tyres for damage
- ❒ General under body check: steering and suspension components, (inc. shock absorbers, all rubber bushes and boots, ball joints and connections) park brake cables, fuel system, exhaust system, brake system, bolts, nuts, hoses, pipes and for leaks
- ❒ Check vehicle ride height

### Interior - petrol and diesel

- ❒ Check clutch pedal travel and free play
- ❒ Check steering wheel play
- ❒ Check brake pedal travel and free play
- ❒ Check park brake lever travel
- ❒ Check park brake ratchet for wear or damage

### Road test - petrol and diesel

- ❒ Check vehicle on the road for braking, steering, engine response and trans operation. Check cruise control, park pawl operation, A/C performance and neutral start switch.

**210,000 km or 10½ years SERVICE COUPON**

I authorise performance of the services specified on the rear of this coupon.
I understand I will be charged for the following hours of labour:

- 1.9 hours

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

.....

.....

Signature ..... Date .....

### Under hood - petrol only

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Check accessory drive belt condition

### Under hood - diesel only

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Check accessory drive belt condition

**210,000 km or 10½ years Service Validation**

Servicing Dealer .....
Brake fluid changed: YES/NO
Date of Service .....
Odometer .....
Signed .....

Additional services performed: .....
.....
.....
.....
.....

P.T.O.

## Under vehicle - petrol and diesel

- ❒ Check level of manual transmission fluid
- ❒ Check level of transfer case fluid
- ❒ Inspect universal joints and splines for wear
- ❒ Lubricate universal joints and sliding sleeve
- ❒ Check level of differential gear oil, front
- ❒ Check level of differential gear oil, rear
- ❒ Inspect disc brake pads and disc wear
- ❒ Tighten wheel nuts
- ❒ Repack front wheel bearings and locking hubs
- ❒ Check tyre pressure and wheels and tyres for damage
- ❒ General under body check: steering and suspension components, (inc. shock absorbers, all rubber bushes and boots, ball joints and connections) park brake cables, fuel system, exhaust system, brake system, bolts, nuts, hoses, pipes and for leaks
- ❒ Check vehicle ride height

## Interior - petrol and diesel

- ❒ Check clutch pedal travel and free play
- ❒ Check steering wheel play
- ❒ Check brake pedal travel and free play

## Road test - petrol and diesel

- ❒ Check vehicle on the road for braking, steering, engine response and trans operation. Check cruise control, park pawl operation, A/C performance and neutral start switch.

**220,000 km or 11 years SERVICE COUPON**

I authorise performance of the services specified on the rear of this coupon.
I understand I will be charged for the following hours of labour:

- 2.1 hours

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

.....

.....

Signature ..... Date .....

**220,000 km or 11 years Service Validation**

Servicing Dealer .....
Brake fluid changed: YES/NO
Date of Service .....
Odometer .....
Signed .....

Additional services performed: .....
.....
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.....
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.....

**Under hood - petrol only**

- ❒ Change engine oil
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check radiator cap and cooling system pressure
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Clean front of radiator core and A/C condenser
- ❒ Replace fuel filter
- ❒ Check air cleaner element
- ❒ Check accessory drive belt condition

P.T.O.

### Under hood - diesel only

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check radiator cap and cooling system pressure
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Clean front of radiator core and A/C condenser
- ❒ Check air cleaner element
- ❒ Check accessory drive belt condition

### Under vehicle - petrol and diesel

- ❒ Check level of manual transmission fluid
- ❒ Check level of transfer case fluid
- ❒ Inspect universal joints and splines for wear
- ❒ Lubricate universal joints and sliding sleeve
- ❒ Check level of differential gear oil, front
- ❒ Check level of differential gear oil, rear
- ❒ Inspect disc brake pads and disc wear
- ❒ Tighten wheel nuts
- ❒ Inspect front and rear hub bearings for looseness
- ❒ Check tyre pressure and wheels and tyres for damage
- ❒ General under body check: steering and suspension components, (inc. shock absorbers, all rubber bushes and boots, ball joints and connections) park brake cables, fuel system, exhaust system, brake system, bolts, nuts, hoses, pipes and for leaks
- ❒ Check vehicle ride height

### Interior - petrol and diesel

- ❒ Check clutch pedal travel and free play
- ❒ Check steering wheel play
- ❒ Check brake pedal travel and free play
- ❒ Check park brake lever travel
- ❒ Check park brake ratchet for wear or damage

### Road test - petrol and diesel

- ❒ Check vehicle on the road for braking, steering, engine response and trans operation. Check cruise control, park pawl operation, A/C performance and neutral start switch.

**230,000 km or 11½ years SERVICE COUPON**

I authorise performance of the services specified on the rear of this coupon.
I understand I will be charged for the following hours of labour:

- 1.2 hours for petrol engine
- 3.2 hours for diesel engine

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

.....

.....

Signature ..... Date .....

**Under hood - petrol only**

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Check accessory drive belt condition

**Under hood - diesel only**

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check all fluid levels: power steering, brake, washer, auto trans, clutch.
- ❒ Check/correct coolant level and % concentration
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Check accessory drive belt condition
- ❒ Adjust valve clearance

P.T.O.

**230,000 km or 11½ years Service Validation**

Servicing Dealer .....
Brake fluid changed: YES/NO
Date of Service .....
Odometer .....
Signed .....

Additional services performed: .....
.....
.....
.....
.....
.....

## Under vehicle - petrol and diesel

- ❒ Check level of manual transmission fluid
- ❒ Check level of transfer case fluid
- ❒ Inspect universal joints and splines for wear
- ❒ Lubricate universal joints and sliding sleeve
- ❒ Check level of differential gear oil, front
- ❒ Check level of differential gear oil, rear
- ❒ Inspect disc brake pads and disc wear
- ❒ Tighten wheel nuts
- ❒ Check tyre pressure and wheels and tyres for damage
- ❒ General under body check: steering and suspension components, (inc. shock absorbers, all rubber bushes and boots, ball joints and connections) park brake cables, fuel system, exhaust system, brake system, bolts, nuts, hoses, pipes and for leaks
- ❒ Check vehicle ride height

## Interior - petrol and diesel

- ❒ Check clutch pedal travel and free play
- ❒ Check steering wheel play
- ❒ Check brake pedal travel and free play

## Road test - petrol and diesel

- ❒ Check vehicle on the road for braking, steering, engine response and trans operation. Check cruise control, park pawl operation, A/C performance and neutral start switch.

**240,000 km or 12 years SERVICE COUPON**

I authorise performance of the services specified on the rear of this coupon.
I understand I will be charged for the following hours of labour:

- 2.3 hours for petrol engine
- 2.3 hours for diesel engine
- add 0.4 hours for auto trans
- add 0.4 hours for manual trans

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

.....

.....

Signature ..... Date .....

Additional services performed: .....

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.....

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.....

**240,000 km or 12 years Service Validation**

Servicing Dealer .....

Brake fluid changed: YES/NO

Date of Service .....

Odometer .....

Signed .....

### Under hood - petrol only

- ❒ Change engine oil
- ❒ Check for oil contamination
- ❒ Check fluid levels: washer.
- ❒ Check/correct coolant level and % concentration
- ❒ Check radiator cap and cooling system pressure
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Clean front of radiator core and A/C condenser
- ❒ Replace fuel filter
- ❒ Replace air cleaner element
- ❒ Check accessory drive belt condition
- ❒ Replace power steering fluid

P.T.O.

## Under hood - diesel only

- ❒ Change engine oil and filter
- ❒ Check for oil contamination
- ❒ Check fluid levels: washer
- ❒ Replace coolant
- ❒ Check radiator cap and cooling system pressure
- ❒ Check all hoses and pipes in engine compartment for deterioration or leaks
- ❒ Clean front of radiator core and A/C condenser
- ❒ Replace fuel filter
- ❒ Replace air cleaner element
- ❒ Check pre air cleaner
- ❒ Check accessory drive belt condition
- ❒ Replace power steering fluid

## Under vehicle - petrol and diesel

- ❒ Change clutch fluid
- ❒ Change brake fluid
- ❒ Change manual transmission fluid
- ❒ Change transfer case fluid
- ❒ Change automatic transmission fluid
- ❒ Inspect universal joints and splines for wear
- ❒ Lubricate universal joints and sliding sleeve
- ❒ Change differential gear oil, front
- ❒ Change differential gear oil, rear
- ❒ Inspect disc brake pads and disc wear
- ❒ Tighten wheel nuts
- ❒ Inspect front and rear hub bearings for looseness
- ❒ Check tyre pressure and wheels and tyres for damage
- ❒ General under body check: steering and suspension components, (inc. shock absorbers, all rubber bushes and boots, ball joints and connections) park brake cables, fuel system, exhaust system, brake system, bolts, nuts, hoses, pipes and for leaks
- ❒ Check vehicle ride height

## Interior - petrol and diesel

- ❒ Check clutch pedal travel and free play
- ❒ Check steering wheel play
- ❒ Check brake pedal travel and free play
- ❒ Check park brake lever travel
- ❒ Check park brake ratchet for wear or damage

## Road test - petrol and diesel

- ❒ Check vehicle on the road for braking, steering, engine response and trans operation. Check cruise control, park pawl operation, A/C performance and neutral start switch.

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